TEXAS STATE VITA

I. Academic/Professional Background

A. Name: Tzee-Kiu Edwin Chow

Title: Professor

B. Educational Background

Degree	Year	University	Major	Thesis/Dissertation
Ph. D.	2005	University of South Carolina	Geography	The Role of Scale in Modeling Hydrologic Response
M.S.	2002	University of South Carolina	Geography	Sensitivity of Modeled Peak Discharge to LIDAR Post-Spacing and DEM Resolution
B.A.	2000	University of Texas at Austin	Geography	
C. University	Experience			
Position		University		Dates
Professor Associate P Visiting Ass Assistant Pr Assistant Pr Instructor Teaching A	sociate Profess rofessor rofessor	Texas State University Texas State University or University of Hong Kong Texas State University University of Michigan – F University of South Carolin University of South Carolin	ıa	Aug 2020 – Present Aug 2013 – July 2020 Aug 2015 – July 2016 Aug 2009 – July 2013 Aug 2005 – May 2009 Jan 2004 – May 2004 Aug 2004 – May 2005 Aug 2002 – Dec 2003
D. Relevant Professional Experience				
Position		Entity		Dates
Research A Research A Software Pr GIS Analys	ssistant oducts Intern	Savannah River Ecological Richland County, South Car Environmental System Rese City of Austin	rolina	Jan 2003 – Dec 2003 Aug 2000 – May 2002 June 2001 – Aug 2001 June 1999 – Aug 1999

E. Other Professional Credentials (licensure, certification, etc.)

II. TEACHING

A. Teaching Honors and Awards:

- 2020 Teaching Award of Honor, Texas State Alumni Association (Texas State University).
- 2018 Favorite Professor honor, Alfred H. Nolle Chapter of Alpha Chi National Honor Scholarship Society (Texas State University).
- 2014 Favorite Professor honor, Alfred H. Nolle Chapter of Alpha Chi National Honor Scholarship Society (Texas State University).
- 2013 Favorite Professor honor, Alfred H. Nolle Chapter of Alpha Chi National Honor Scholarship Society (Texas State University).
- 2012 Outstanding Professor Award, Graduate forum, Department of Geography (Texas State University).
- 2010 Favorite Professor honor, Alfred H. Nolle Chapter of Alpha Chi National Honor Scholarship Society (Texas State University).
- 2008 Distinguished Professor Award Nomination, University of Michigan Flint.
- 2008 Golden Apple Recipient, University of Michigan Flint.
- 2007 Distinguished Professor Award Nomination, University of Michigan Flint.
- 2006 Golden Apple Recipient, University of Michigan Flint.
- B. Courses Taught:

Course No.	Course Title	Institution
GEO 7418	Technical Foundation & Methods in GIS	Texas State University
GEO 7399	Dissertation	Texas State University
GEO 7390	Independent Study	Texas State University
GEO 7364	Geocomputation	Texas State University
GEO 7318	GIS and Environmental Geography	Texas State University
GEO 5419	Geographic Information Systems II	Texas State University
GEO 5418/7417	Geographic Information Systems I	Texas State University
GEO 5408/4422	Web Mapping	Texas State University
GEO 5399	Thesis	Texas State University
GEO 5335	Directed Research	Texas State University
GEO 5301	Multivariate Quantitative Methods	Texas State University
GEO 4420	GeoProgramming	Texas State University
GEO 4310/5308	Regional Field Studies	Texas State University
GEO 3426	Advanced GIS	Texas State University
GEO 3333	Geography of East Asia	Texas State University
GEO 2426	Fundamentals of GIS	Texas State University
GEOG 6007	Research Methods in Geography	University of Hong Kong
GEOG 7136	Research Methods and Directed Projects	University of Hong Kong
	in China Development Studies	
GEO 499	Independent Study	University of Michigan – Flint
GEO 498	Research in Geoscience	University of Michigan – Flint

GEO 404 GEO 372 GEO 331 GEO 203 RPL 470 RPL 371 RPL 370 ENV 289	Spatial Analysis Seminar Biogeography Geomorphology and Soils Introduction to Spatial Analysis GIS Practicum GIS II GIS I Web Mapping	University of Michigan – Flint University of Michigan – Flint
ENV 100	Introduction to Environmental Science	University of Michigan – Flint
GEOG E363	Introduction to GIS	University of South Carolina

C. Graduate Theses/Dissertations or Exit Committees (if supervisor, please indicate):

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Role	Student Name	Degree	Graduated
Supervisor	David Hickman	M.S.	Spring 2011
Supervisor	Nicholas Ferri	M.A.Geo.	Spring 2012
Supervisor	Joseph Nicosia	M.A.Geo.	Summer 2012
Supervisor	Richard Lee	M.A.Geo.	Fall 2013
Supervisor	Sharmila Partab	M.A.Geo.	Fall 2013
Supervisor	Khila Dahal	Ph.D.	Spring 2014
Supervisor	Victoria Stengel	M.S.	Spring 2014
Supervisor	Nathaniel Dede-Bamfo	Ph.D.	Spring 2017
Supervisor	Alex Martinez	M.A.Geo.	Summer 2017
Supervisor	Thomas Pesek	M.A.Geo.	Spring 2018
Supervisor	Abdullatif Alyaqout	M.S.	Summer 2018
Supervisor	Anna Essington	M.A.Geo.	Summer 2018
Supervisor	Han Lu	M.A.Geo.	Fall 2018
Supervisor	Mayowa Lasode	M.A.Geo.	Summer 2019
Supervisor	Joyce Chien	M.A.Geo.	Fall 2019
Supervisor	Abdullatif Alyaqout	Ph.D.	Spring 2021
Supervisor	Nathan Pasley	M.S.	Fall 2022
Supervisor	Ryan Bobo	M.A.Geo.	Fall 2023
Supervisor	Timothy Szpakowski	M.A.Geo.	Fall 2023
Supervisor	Melissa Jurrens Ruiz	M.A.Geo.	Fall 2023
Committee member	Jennifer Knowles	M.A.Geo.	Summer 2011
Committee member	P. Chance Kinnison	M.S.	Spring 2012
Committee member	Robert Landauer	M.A.Geo.	Spring 2012
Committee member	Ryan Schuermann	M.S.	Summer 2012
Committee member	Paul Crossley	M.S.	Fall 2012
Committee member	Shelby Coder	M.S.	Fall 2012
Committee member	Gregory Mavian	M.A.Geo.	Fall 2012
Committee member	Gregory Mast	M.S.	Spring 2013
Committee member	Alisha Jimenez	M.S.	Spring 2013
Committee member	Melissa Holmes	M.S.	Spring 2013
Committee member	Eric Clennon	M.A.Geo.	Spring 2013
Committee member	Guinevere McDaid	M.S.	Summer 2013
Committee member	Justin McCreight	M.S.	Fall 2013
Committee member	Ryan Spencer	M.A.Geo.	Fall 2013

Committee member	David Nicosia	Ph.D.	Fall 2013
Committee member	Brandon Blackmon	M.A.Geo.	Spring 2013
Committee member	Yan Lin	Ph.D.	1 0
			Spring 2014
Committee member	Kanika Verma	Ph.D.	Spring 2014
Committee member	Monique Nava	M.A.Geo.	Summer 2014
Committee member	Dana Scanes	M.S.	Spring 2015
Committee member	Luke Dailey	M.A.Geo.	Spring 2015
Committee member	Brad Jackson	M.S.	Spring 2015
Committee member	David Parr	Ph.D.	Summer 2015
Committee member	David Melancon	M.A.Geo.	Fall 2015
Committee member	Xi Gong	Ph.D.	Spring 2016
Committee member	Ming Leung^	Ph.D.	Fall 2016
Committee member	Pak Hong Ricci Yue^	Ph.D.	Spring 2017
Committee member	John Phillips	M.S.	Spring 2017
Committee member	Jinhee Lee	Ph.D.	Summer 2017
Committee member	David Andresen	M.S.	Fall 2017
Committee member	Ugochukwu Umeokafor	M.A.Geo.	Spring 2018
Committee member	Mogahid Adam Ahmed Hussein	M.S.	Spring 2018
Committee member	Ruojing Scholz	Ph.D.	Spring 2018
Committee member	Fangda Lu	M.A.Geo.	Summer 2018
Committee member	Lucas Chavez	M.S.	Fall 2019
Committee member	Yunuen R. Langarica	Ph.D.	Fall 2019
Committee member	David Szpakowski	Ph.D.	Summer 2020
Committee member	Milad Korde	Ph.D.	Spring 2021
Committee member	Ting Hsuan Yang	M.A.Geo.	Spring 2021
Committee member	Elena Shabalina	M.S.	Fall 2021
Committee member	Dane Atkins	Ph.D.	Spring 2022
Committee member	John Moore	M.A.Geo	Summer 2022
Committee member	Ally Schlandt	M.S.	Fall 2022
Committee member	Carlos Soto	M.S.	Spring 2023
Committee member	Yusik Choi	Ph.D.	Spring 2023
Committee member	Priyanjali Bose	M.S.	Fall 2023
Committee member	Amy Jackson	M.S.	Fall 2023
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Supervisor	Fahmina Ibrahim	Ph.D.	In Progress
Supervisor	Md Tousif Tanzir	Ph.D.	In Progress
Supervisor	Eric Fotey	M.A.Geo.	In Progress
Supervisor	Lauren Filipe	M.A.	In Progress
Committee member	Christine Love	Ph.D.	In Progress
Committee member	Yanyan Liu	Ph.D.	In Progress
Committee member	David Mills	Ph.D.	In Progress
Committee member	Khan Mortuza Bin Asad	Ph.D.	In Progress
Committee member	Mogahid Adam Ahmed Hussein	Ph.D.	In Progress
Committee member	Xiu Wu	Ph.D.	In Progress
Committee member	Brittiny Moore	M.S.	In Progress

^ University of Hong Kong

D. Courses Prepared (Revised) and Curriculum Development:

Course No.	Course Title	Institution
GEO 7364	Geocomputation	Texas State University
GEO 5419	GIS II	Texas State University
GEO 4393C	GeoProgramming	Texas State University
GEO 4310	Regional Field Studies: Geographies of Taiwa	an Texas State University
GEO 3333	Geography of East Asia	Texas State University
GEO 404	Spatial Analysis Seminar	University of Michigan – Flint
RPL 470	GIS Practicum	University of Michigan – Flint

- E. Funded External Teaching Grants and Contracts:
- 2010 Geography Education Material Development American Association of Geographers (AAG) Companion Multimedia Educational Website for "Understanding the Changing Planet", AAG (PI: N. T. Huynh; Co-PIs: T. E. Chow, J. Jensen and O. Muniz), \$17,000 (2010-2011).
- F. Submitted, but not Funded, External Teaching Grants and Contracts:
- G. Funded Internal Teaching Grants and Contracts:
- 2019 "Study Abroad Program: Geographies of HK", Program Development Mini Grant, Texas State University, \$2,571.
- 2007 Course Design Fellowship, University of Michigan Flint, \$1,630.
- 2006 Faculty Development Pedagogical Grant, University of Michigan Flint, \$3,000.
- H. Submitted, but not Funded, Internal Teaching Grants and Contracts:

I. Other:

III. SCHOLARLY/CREATIVE

- A. Works in Print
- 1. Books (if not refereed, please indicate)
- a. Scholarly Monographs:

b. Textbooks:

- c. Edited Books:
- d. Chapters in Books: [corresponding author *; student author ^]
 - 7) *Yuan, Y., Y. Qiang, K. Bin Asad[,] and **Chow, T. E**., 2020. Point Pattern Analysis. *The Geographic Information Science & Technology Body of Knowledge* (1st Quarter 2020 Edition), John P. Wilson (ed.). <u>https://doi:10.22224/gistbok/2020.1.13</u> [refereed]
 - 6) * Chow, T. E., and Yuan, Y., 2019. GIS APIs. *The Geographic Information Science & Technology Body of Knowledge* (2nd Quarter 2019 Edition), John P. Wilson (Ed.). https://DOI.org/10.22224/gistbok/2019.2.15. [refereed]
 - 5) ***Chow, T. E.**, and B. Kar. 2017, "Challenges in Error/Accuracy Assessment for Fused Data Remote Sensing and GIS", <u>Integrating Scale in Remote Sensing and GIS</u>. Edited by Quattrochi D., E. A. Wentz, N. Lam, and C. Emerson, (CRC Press), pp. 125-156. [refereed]
 - 4) *Kar, B. and Chow, T. E., 2017, "Issues of and Techniques for Data Fusion and Multi-Scaling of Spatial Data", <u>Integrating Scale in Remote Sensing and GIS</u>. Edited by Quattrochi D., E. A. Wentz, N. Lam, and C. Emerson, (CRC Press), pp. 95-124. [refereed]
 - 3) **Chow, T. E.**, 2013. "We know who you are and we know where you live": A research agenda of web demographics, *Crowdsourcing Geographic Knowledge*. *Volunteered Geographic Information (VGI) in Theory and Practice*. Edited by Sui D., S. Elmwood and M. Goodchild, (Dordrecht, Netherland: Springer). pp. 265-285. [refereed]
 - 2) Chow, T. E., 2011. "Geography 2.0 A Mashup Perspective", Advances in Web-based GIS, Mapping Services and Applications. Vol. of ISPRS Book Series, edited by S. Dragicevic and S. Li, (Taylor & Francis), pp. 15-36. [refereed]
 - Gaines, K. F., T. E. Chow, and S. A. Dyer., 2008. "Exposure and Exposure Assessment", *Ecotoxicology*. Vol. [2] of Encyclopedia of Ecology, 5 vols., edited by S. E. Jørgensen and B. D. Fath, (Oxford: Elsevier), pp. 1527-1534. [refereed]
- e. Creative Books:

2. Articles

a. Refereed Journal Articles: [corresponding author *; student author ^]

- 35) **Chow, T. E.***, D.P. Sanchez[^], P. Amatya, M.T. Tanzir[^], In Press, Identification and analysis of Multiple Launch Rocket System deployment: The war in Ukraine, *Applied Geography*.
- 34) Szpakowski, D. M., J. L. R. Jensen*, T. E. Chow and D. R. Butler, 2023, Assessing the use of burn ratios and red-edge spectral indices for detecting fire effects in the greater Yellowstone ecosystem, A study of the relationship between fire hazard and burn severity in Grand Teton National Park, USA, *Forests*. 14(7): 1508. <u>https://doi.org/10.3390/f14071508</u>
- 33) **Chow, T. E.***, J. Chien and K. Meitzen, 2023, Validating the Quality of Volunteered Geographic Information (VGI) for Flood Modeling of Hurricane Harvey in Houston, Texas, *Hydrology*. (10)5: 113. <u>https://doi.org/10.3390/hydrology10050113</u>
- 32) Chow, T. E.*, P.S.F. Yip and K.-P. Wong, 2023, An integrated framework of mobile crowd estimation for the 2019, July 1st rally in Hong Kong, *Multimedia Tools and Applications*. <u>https://doi.org/10.1007/s11042-023-15417-7</u>
- 31) Dede-Bamfo*, N., **T. E. Chow**, and C. Ekeanyanwu[^], 2023, Local perspective on spatial accessibility to market in the Afram Plains, Ghana, *International Journal of Applied Geospatial Research*. 14(1): 322409. <u>https://doi.org/10.4018/IJAGR.322409</u>
- 30) Clark^{*}, A. E., M. K. Lasode[^], K. B. Asad[^] and **T. E. Chow**, In Press, Site Assessment for New Fire Stations: A Case study in Austin, Texas, *Southwestern Geographers*.
- 29) Zhang, J., X. Wu^{*} and **T. E. Chow**, 2021, Space-time cluster's detection and geographical weighted regression analysis of COVID-19 mortality impacts on Texas counties, USA, *International Journal of Environmental Research and Public Health*. 18(11): 5541. <u>https://doi.org/10.3390/ijerph18115541</u>
- 28) Szpakowski[^], D. M., J. L. R. Jensen^{*}, D. R. Butler and **T. E. Chow**, 2021, A study of the relationship between fire hazard and burn severity in Grand Teton National Park, USA, *International Journal of Applied Earth Observations and Geoinformation*. 98: 102305. <u>https://doi.org/10.1016/j.jag.2021.102305</u>
- 27) Suh*, T., and Chow, T. E., 2021, Developing a digital marketing tool for ethnic ventures' mixed business model and marketing-shaping: A design scientific approach of web demographics, *Industrial Marketing Management*. 93: 10-21. <u>https://doi.org/10.1016/j.indmarman.2020.12.014</u>
- 26) Lasode^{*}, M. K., **T. E. Chow**, R. R. Hagelman, R. D. Blanchard, O. O. Lasode, A. E. Iyanda, 2021, The impact of homelessness in social vulnerability assessment: A case study in Austin, TX, *Social and Economic Geography*. 6(1): 1-12. <u>https://doi:10.12691/seg-6-1-1</u>

- 25) **Chow*, T. E.**, Y. Choi[^], M. Yang[^], D. Mills[^], R. P. H. Yue, 2020, Geographic pattern of human mobility and COVID-19 before and after Hubei Lockdown, *Annals of GIS*. <u>https://doi.org/10.1080/19475683.2020.1841828</u>
- 24) Reygadas^{*}, Y., J. L. R. Jensen, G. G. Moisen, N. Currit and **T. E. Chow**, 2020. Assessing the relationship between vegetation greenness and surface temperature through Granger causality and Impulse-Response coefficients: a case study in Mexico, *International Journal of Remote Sensing*. 41(10): 3761-3783. https://doi.org/10.1080/01431161.2019.1711241.
- 23) Chow*, T. E., M. Ng, D. W. S. Wong, and C. C. Chan[,], 2019, Exploratory multivariate space-time analysis of colonial justice in Hong Kong during 1900-1930, *GeoJournal*. <u>https://doi.org/10.1007/s10708-019-10066-6.</u>
- 22) Yuan*, Y., Y. Lu, T. E. Chow, C. Ye, A. Alyaqout^A, Y. Liu, 2019, Social Media Enabled Smart Cities: Who, Where, When, and What? *Special Issue of Annals of the American Association of Geographers (AAG)*. 110(2): 462-475. https://doi.org/10.1080/24694452.2019.1631144.
- 21) Chow*, T. E., 2019, A crowdsourcing-geocomputational framework of mobile crowd simulation and estimation, *Cartography and Geographic Information Science*. 46(1): 2-20. doi:10.1080/15230406.2018.1524314.
- 20) **Chow*, T. E.**, and Martinez^, A., 2018, Site selection of offshore wind farms using fuzzy modeling: A case in Massachusetts, *Northeastern Geographer*. 10: 1-26.
- 19) Chow*, T. E., R. T. Schuermann^A, A. H. H. Ngu and Khila R. Dahal, 2018, Spatial mining of migration pattern from web demographics, *International Journal of Geographic Information Science*. 32(10): 1977-1998. <u>https://doi.org/10.1080/13658816.2018.1470633</u>.
- 18) Ng*, M., T. E. Chow and D. W. S. Wong, 2016, Geographical Dimension of Colonial Justice: Using GIS in Research on Law and History, *Law and History Review*. 34(4): 1027-1045.
- 17) **Chow*, T. E.**, N. Dede-Bamfo[^], and K.R. Dahal[^], 2016, Geographic Disparity of Positional Errors and Matching Rate of Residential Addresses among Geocoding Solutions, *Annals of GIS*. 22(1):29-42.
- 16) Lee^{^*}, R. J., and Chow, T. E., 2015, Post-wildfire assessment of vegetation regeneration in Bastrop, Texas using Landsat imagery, *Geographic Information Science & Remote Sensing*. 52(5): 609-626.
- 15) Dahal^{*}, K. R., and **Chow, T. E.**, 2015, Characterization of the neighborhood sensitivity of irregular cellular automata model of urban growth, *International Journal of Geographic Information Science*. 29(3): 475-497.
- 14) Medel^{*}, M., Y. Lu and **T. E. Chow,** 2015, Mexico's drug network: modeling the smuggling routes towards the United States, *Applied Geography*. 60: 240-247.

- 13) Dahal^{*}, K. R., and **Chow, T. E.**, 2014, An Agent-Integrated Irregular Automata model of urban land use dynamics, *International Journal of Geographic Information Science*. 28(11): 2281-2303.
- 12) Dahal^{*}, K. R., and **Chow, T. E.**, 2014, Parcel-Divider: a GIS toolset for automated partitioning of urban lands, *Environmental Modeling and Software*. 55: 222-234.
- Hickman[^], D., and Chow^{*}, T. E., 2012, Development of a composite model of quality of life: a case study in Austin, Texas. *Geographic Information Science and Remote Sensing*. 49(6): 802-821.
- 10) Duarte^{^*}, A., D. M. Wolcott[^], **T. E. Chow**, and M. A. Ricca, 2012, Identifying and prioritizing recovery sites for the endangered Aleutian shield fern, *Journal of Fish and Wildlife Management*. 3(2): 303-310.
- 9) Tian^{*}, N., P. Goovaerts, F. B. Zhan, **T. E. Chow**, and J. G. Wilson, 2012. Identifying risk factors for disparities in breast cancer mortality among African American and Hispanic women, *Women's Health Issues*. 22(3): 267-276.
- 8) **Chow*, T. E.**, Y. Lin^, N.T. Huynh, and J. Davis, 2012. Using Web Demographics to Model Population Change of Vietnamese-Americans in Texas between 2000-2009, *GeoJournal*.77(1): 119-134.
- 7) Wan^{*}, N., F. B. Zhan, B. Zou and **T. E. Chow**, 2011. A relative spatial access assessment approach for analyzing potential spatial access to colorectal cancer services in Texas, *Applied Geography*. 32(2): 291-299.
- 6) Chow*, T. E., Y. Lin[^], and W. D. Chan. 2011, The Development of a Web-based Demographic Data Extraction Tool for Population Monitoring, *Transactions in GIS*. 15(4): 479-494.
- 5) Slade, R. M. Jr., and **Chow, T. E.**, 2011, Statistical relations of precipitation and stream runoff for El Niño and La Niña periods, Texas Hill Country, *Texas Water Journal*. 2(1): 1-22.
- 4) Chow*, T. E., and Sadler^, R., 2010. The consensus of local stakeholders and outside experts in suitability modeling for future camp development, *Landscape and Urban Planning*, 94:9-19.
- 3) **Chow*, T. E.**, and Hodgson, M.E., 2009. Effects of Lidar post-spacing and DEM resolution to mean slope estimation, *International Journal of Geographic Information Science*. 23(10):1277-1295.
- 2) **Chow*, T. E.**, 2008. The potential of Maps APIs for Internet GIS, *Transactions in GIS*. 12(2): 179-191.

1) **Chow*, T. E.**, K.F. Gaines, M.E. Hodgson, and M.A. Wilson, 2005. Habitat and Exposure Modeling of Raccoon for Ecological Risk Assessment: A Case Study in Savannah River Site, *Ecological Modelling*. 189: 151-167.

b. Non-refereed Articles: [* Since tenured]

- 17 Chow*, T. E., 2021. The grassroot movement of "Digital Dunkirk" in Afghanistan (Chinese title:]]]]]Digital Dunkirk]]]]]), *The StandNews*. August 31, 2021. Web access: <u>https://thestandnews.com/international/digital-dunkirk-]]]</u>, published in Chinese._
- 16 **Chow*, T. E.**, 2021. The Map of 12357 (Chinese title: **D**, *The StandNews*. June 14, 2021. Web access: <u>https://thestandnews.com/china/</u>**D**, published in Chinese._

15 Chow*, T. E., 2020. Simulating the 2019 July 1st Rally in Hong Kong by GeoComputation (Chinese title: 2019 2019 2019 2019), *The StandNews*. August 22, 2019. Web access: <u>https://thestandnews.com/politics/2019 2019 2019</u>, published in Chinese._

- 14 **Chow*, T. E.**, 2020. The Count under Pressured: The Crowd Size of the 31st Anniversary of June 4th Candlelight Vigil (Chinese title:]] 31 []] []] []] []] []]], *The StandNews*. August 22, 2019. Web access: <u>https://thestandnews.com/politics/]]-31-[]] []]</u>, published in Chinese._
- 13 **Chow*, T. E.**, 2020. Hong Kong in Partial Shut-down (Chinese title:]]] []]]]), *The StandNews*. March 21, 2020. Web access: https://thestandnews.com/society/]]]]]], published in Chinese._
- 12 Chow*, T. E., 2020. The Revelation from Confirmed Cases and In-Migration (Chinese title: []]]]]]]]]), *The StandNews*. February 11, 2020. Web access: <u>https://thestandnews.com/society/[]]]]]</u>], published in Chinese._

- 9 **Chow*, T. E.**, 2019. The revelation and reflection of June 9th Rally Attendance (Chinese title: 6.9 [][][][]]]), *The StandNews*. June 13, 2019. Web access: <u>https://thestandnews.com/politics/[][][]]</u>, published in Chinese.

- 8 **Chow*, T. E.**, 2019. The attendance of 30th anniversary June 4th Candlelight Vigil the forbidden numbers (Chinese title: **30 30 ...**, *the StandNews*. June 5, 2019. Web access: <u>https://thestandnews.com/politics/</u>**..**, 30**..**, published in Chinese.
- 7 **Chow*, T. E.**, 2019. How to count people in a rally protest? (Chinese title: **...**), *The StandNews*. May 8, 2019. Web access: <u>https://thestandnews.com/society/</u>**...**, published in Chinese.
- 6 **Chow*, T. E.**, 2018. The accelerating polarization of head count in June 4th Candle Vigil (Chinese title: []____]), *The StandNews*. June 11, 2018. Web access: <u>https://thestandnews.com/society/[]____</u>, published in Chinese.
- 5) **Chow*, T. E.**, 2017. The mystery of July 1st Rally attendance (Chinese title: _____), *The StandNews*. July 26, 2017. Web access: <u>https://thestandnews.com/politics/____/</u>, published in Chinese.
- 4) **Chow*, T. E.**, 2017. Why should I go there and I count? (Chinese title: □□□□□□□□□?), *The StandNews*. July 1, 2017. Web access: <u>https://www.thestandnews.com/politics/□□□□□</u>□...□/, published in Chinese.
- 3) **Chow*, T. E.**, 2017. I go there I count (Chinese title: _____), *The StandNews*. June 25, 2017. Web access: <u>https://www.thestandnews.com/society/</u>_____, published in Chinese.
- 2) **Chow*, T. E.**, 2017. Population estimation of June 4th Candle Vigil and alternative facts (Chinese title: [][][][][]]]], *Ming Pao Press*. June 17, 2017. Web access: <u>https://m.mingpao.com/pns/dailynews/web_tc/article/20170617/s00012/1497635598032</u>, published in Chinese.
- 3. Conference Proceedings
- a. Refereed Conference Proceedings: [corresponding author*; student author ^]
 - 8) *Kar, B., **T. E. Chow**, N. Dede-Bamfo and X. Liu, 2019, Using social media to geo-target emergency management efforts, *EM-GIS 2019: 5th ACM SIGSPATIAL Workshop on the Use of GIS in Emergency Management*, November 5, Chicago, IL.
 - 7) *Chow, T. E., 2019. Estimating the crowd size of a rally by crowdsourcinggeocomputation. In *Abstracts of the International Cartographic Association*, 1, 46, <u>https://doi.org/10.5194/ica-abs-1-46-2019</u>.

- 6) ***Chow, T. E.,** 2018. When GeoAI meets the crowd. In *GeoAI'18: 2nd ACM SIGSPATIAL Workshop on AI for Geographic Knowledge Discovery*, November 6, Seattle, WA, pp. 52-53. <u>doi:10.1145/3281548.3281551</u>
- 5) *Schuermann[^], R. T., and **Chow, T. E.,** 2014. Geovisualization of local and regional migration using web demographics, *International Archives of the Photogrammetry*, *Remote Sensing and Spatial Information Sciences*. XL-2: 93-97.
- 4) *Clennon[^], E., R. D. Blanchard and **T. E. Chow**, 2013, Business clustering in knowledgebased industries in the Austin-Round Rock, Texas, metropolitan statistical area, *Papers in Applied Geography*. 36: 367-376.
- 3) Chow, T. E., Anne H. H. Ngu, Yan Lin[^], Clark Phillips[^], and Stan Thornhill[^], 2012. Record linkage of web demographics as a GeoComputation challenge, Invited position paper in GIScience 2012 Workshop on Role of Volunteered Geographic Information: Quality and Credibility. Columbus, OH: <u>http://www.ornl.gov/sci/gist/workshops/2012/</u> <u>documents/Chow,%20Tze%20Kiu%20-%20Paper.pdf</u>
- 2) Chow, T. E., 2011. VGI-enabled 4D GIS, Invited position papers for Specialist Meeting in Future Direction of Spatial Demography. (Acceptance rate: 24/78 = 30.7%) <u>http://ncgia.ucsb.edu/projects/spatial-demography/docs/Chow-position.pdf</u>
- 1) **Chow, T. E.**, 2010. An Assessment of Hydrologic Enforcement Methods on Various Drainage Features, *Proceedings of the Sixth International Conference of Geographic Information Science*. <u>http://www.giscience2010.org/pdfs/paper_177.pdf</u>
- b. Non-refereed:
- 4. Abstracts:
- 5. Reports:
 - 1) **Chow, T.E.**, 2001. "User Manual of Curve Number Script in Hydrologic Modeling", Stormwater Services in the Department of Public Works, Richland County, South Carolina.
- 6. Book Reviews:
- 7. Other (student achievement):
 - Advisor, Hickman, D. T., 2010. Assessing urban walkability: a suitability model rating ease of travel with limited reliance upon personal automobile travel in Austin, Texas, 2nd Place Winner, *Applied Geography Conference 2010*. <u>http://applied.geog.kent.edu/Winners2010.htm</u>

- Advisor, Sadler, R., 2007. Using suitability analysis to evaluate suitable conservation areas and future development at Camp Tapico, Meeting of Minds Undergraduate Research Conference XV *Journal of Undergraduate Research*. 9: 286-292.
- B. Works not in Print
- 1. Papers Presented at Professional Meetings: [Note: * indicates a student author]
 - 53) **Chow, T. E.**, and Leung, K. C., 2023. Hong Kong Islands in the United States: The Census 2020 and Digital Landscapes, *International Geographical Union (IGU) Thematic Conference on: Islands in Relations: Conflicts, Sustainability, and Peace*, April 3 April 7, Osaka, Japan.
 - 52) **Chow, T. E.**, and Yang, T. H., 2023. Fusing Social Media Posts into Daily Floodplain Delineation of Hurricane Harvey, *Annual Conference of Association of American Geographers*, March 23 March 27, Denver, Colorado, USA.
 - 51) **Chow, T. E.**, T. H. Yang and E. Fotey, 2022. Geospatial story-mining of 1956 Algeria Strike, *Annual Conference of Association of American Geographers*, Feb 25 March 1, Virtual.
 - 50) **Chow, T. E.**, 2021. What is where when it matters: A geocomputational approach, *Texas GIS 2022*, November 14-20, Virtual.
 - 49) **Chow, T. E.**, T. H. Yang and E. Fotey, 2021. Extraction of water depth from social media posts in Hurricane Harvey, *Annual Conference of Association of American Geographers*, April 7-11, Virtual.
 - 48) **Chow, T. E.,** 2019. Estimating the crowd size of a rally by crowdsourcinggeocomputation. In *International Cartographic Conference*, July 15-20, Tokyo, Japan.
 - 47) Chow, T. E., 2019. A Panelist in "Social Sensing and Big Data Computing for Disaster Management", Annual Conference of Association of American Geographers, April 3-7, Washington, D.C.
 - 46) Yuan, Y., Y. Lu, Y. Liu and **T.E. Chow**, 2019. The missing parts from social media enabled smart city: Who, where, when, and what, *Annual Conference of Association of American Geographers*, April 3-7, Washington, D.C.
 - 45) **Chow, T. E.**, and Alyaqout*, A., 2019. Exploring the locational accuracy of social media during Hurricane Harvey, *Annual Conference of Association of American Geographers*, April 3-7, Washington, D.C.
 - 44) **Chow, T. E.**, 2018. When GeoAI meets the crowd, *GeoAI'18: 2nd ACM SIGSPATIAL Workshop on AI for Geographic Knowledge Discovery*, November 6, Seattle, WA.

- 43) **Chow, T. E.**, 2018. Simulate Crowd Movement and Behaviors in a Rally, *International Conference of Geoinformatics*, June 28-30, Kunming, Yunnan, China.
- 42) **Chow, T. E.**, 2018. A crowdsourcing-geocomputational framework of mobile crowd simulation, *University Consortium of Geographic Information Science Symposium*, May 22-24, Madison, WI.
- 41) **T. E. Chow**, 2018. Small Area Population Modeling, *Annual Conference of Association of American Geographers*, April 10-14, New Orleans, LA.
- 40) Kar, B., **T. E. Chow**, and X. Liu, 2018. Analyzing tweets to understand spatio-temporal variability of situation awareness information, *Annual Conference of Association of American Geographers*, April 10-14, New Orleans, LA.
- 39) **Chow, T. E.**, 2017. Discovery of Small Area Population through Web Demographics, *Population Association of Japan*, June 11-12, Sendai, Japan.
- 38) **Chow, T. E.**, 2017. A Crowdsourcing Approach to Estimate a Mobile Population, *Annual Conference of Association of American Geographers*, April 6-10, Boston, MA.
- 37) **Chow, T. E.**, M. Ng, C. Chan, and D.W.S. Wong, 2016. Linking Past to Present: Reconstructing the Historical Geographies of Colonial Hong Kong, *Population Association of Japan*, June 11-12, Kashiwa, Japan.
- 36) **Chow, T. E.**, 2015. Evaluation of Tobler's and Zipf's Laws in Web Demographics Analytics, *International Conference of Geoinformatics*, June 18-20, Wuhan, China.
- 35) **Chow, T. E.**, R. T. Schuermann, A. H. H. Ngu and C. Phillips, 2015. Relevance of Tobler's and Zipf's Laws to Web Demographics? *Annual Conference of Association of American Geographers*, April 21-26, Chicago, IL.
- 34) N. Dede-Bamfo, and Chow, T. E., 2015. Exploring Post-Disaster Tweets for Vulnerability Assessment, Annual Meeting of Association of American Geographers, April 21-26, Chicago, IL.
- 33) R. T. Schuermann, and Chow, T. E., 2014. Geovisualization of local and regional migration using web-mined demographics, *ISPRS TCII/IGU Joint International Conference on Geospatial Theory, Processing, Modeling and Applications*, October 5-8, Toronto, ON.
- 32) **Chow, T. E.**, and Schuermann, R. T., 2014. Spatio-temporal characteristics of web demographics for record linkage, *University Consortium of Geographic Information Science 2014 Symposium*, May 19-21, Pasadena, CA.
- 31) Gong, X., T. E. Chow, and F. B. Zhan, 2014. The Importance of "Space" in Strategies of Team Sports: An Agent-based Modeling Approach, *Annual Meeting of Association of American Geographers*, April 8-12, Tampa, FL.

- 30) **Chow, T. E.**, and Schuermann, R. T., 2014. Spatiotemporal mining of migration patterns from web demographics, *Annual Meeting of Association of American Geographers*, April 8-12, Tampa, FL.
- 29) Chow, T. E., N. Dede-Bamfo and K. Dahal, 2013. Quality Assessment of Internet/Desktop Geocoding Services, 8th International Symposium on Spatial Data Quality, May 30 - June 1, Hong Kong SAR, China.
- 28) **Chow, T. E.**, and Dahal, K., 2013. Web, the People, *Annual Meeting of Association of American Geographers*, April 9-13, Los Angeles, CA.
- 27) Chow, T. E., J. Jensen, K. Ridenour, K. Crosthwaite, S. Rissel, L. Temple, 2012. Fuel Model Characterization of Central Texas Ecosystem for Wildfire Modeling, *Annual Meeting of Association of American Geographers*, February 24, New York, NY.
- 26) **Chow, T. E.**, 2011. Modeling Fire Growth Simulation in Grassland Ecosystem, *International Conference of Geoinformatics*, June 23-26, Shanghai, China.
- 25) **Chow, T. E.**, Dede-Bamfo*, N., and Dahal*, K. R., 2011. Characteristics of Geographic Bias in Address Matching, *Annual Meeting of Association of American Geographers*, April 12-17, Seattle, WA.
- 24) **Chow, T. E.**, 2011. Progress Update and Research Agenda of Census 2.0, AAG 2011 *Volunteered Geographic Information Pre-conference*, April 11, 2011, Seattle, WA
- 23) **Chow, T. E.**, 2010. An Assessment of Hydrologic Enforcement Methods on Various Drainage Features, *Sixth International Conference of Geographic Information Science*, September 14-17, Zurich, Switzerland.
- 22) **Chow, T. E.**, N. Heger*, X. Meng*, J. Jensen and K. Ridenour, 2010. "Sensitivity of Fire Growth Simulation to Lidar-derived Elevation and Fuel Maps", *International Conference of Geoinformatics*, June 18-20, Beijing, China.
- 21) **Chow, T. E.**, 2010. "Census 2.0", *Annual Meeting of Association of American Geographers*, April 14-19, Washington D.C.
- 20) **Chow, T. E.**, 2010. "How Does Hydrologic Enforcement Affect Lidar-derived DEM?", *International Lidar Mapping Forum*, March 3-5, Denver, CO.
- 19) **Chow, T. E.**, and Sadler*, R., 2009. "Uncertainty of Expert Knowledge in Suitability Modeling", *Annual Meeting of Association of American Geographers*, March 22-27, Las Vegas, NV.
- 18) **Chow, T. E.**, and Wolverton*, M., 2009. "Assessment of Hydrologic Enforcement in Lidar-derived DEM", *Annual Meeting of American Society for Photogrammetry & Remote Sensing*, March 9-13, Baltimore, MD.

- 17) **Chow, T. E.**, and Sadler*, R., 2008. "Integration of Expert Knowledge in GIS-based Land Use Suitability Analysis", *Annual Meeting of International Conference of Geographic Information Systems*, July 2-5, Istanbul, Turkey.
- 16) **Chow, T. E.**, and Sadler*, R., 2008. "Positional Error Assessment in Spatial Database", *Annual Meeting of American Society for Photogrammetry & Remote Sensing*, April 29-May 2, Portland, OR.
- 15) **Chow, T. E.**, 2008. "Linking GIS to Stormwater Modeling", *Annual Meeting of Association of American Geographers*, April 15-19, Boston, MA.
- 14) **Chow, T. E.**, 2007. "Maps APIs for Internet GIS Applications", *Annual Meeting of Association of American Geographers*, April 17-22, San Francisco, CA.
- 13) **Chow, T. E.**, and Kuptz*, R.A., 2006. "Accuracy Assessment of Contour-derived Elevation and Terrain Slope", *Fall Specialty Meeting of American Society for Photogrammetry & Remote Sensing*, November 6-10, San Antonio, TX.
- 12) **Chow, T. E.**, 2006. "Scale Dependence of Rainfall-Runoff Model", *Annual Meeting of Association of American Geographers*, March 7-11, Chicago, IL.
- 11) **Chow, T. E.**, 2005. "A Geospatial Tools for Stormwater Modeling and Management", *Annual Meeting of AWRA*, November 7-10, Seattle, WA.
- 10) Gaines, K.F., **Chow, T. E.**, M.A. Wilson, and M. E. Hodgson, 2005. "A spatially explicit exposure model to estimate contaminant exposure in wildlife", *The Wildlife Society Twelfth Annual Conference*, Sept. 25-29, Madison, WI.
- 9) **Chow, T. E.**, 2005. "The Effect of Scale in Modeling Hydrologic Response", *Young Scholar Summit of International Association of Chinese Professional of Geographic Information System*, June 24- July 4, Nanchang and Wuhan, China.
- 8) **Chow, T. E.**, and Hodgson, M.E., 2005. "A Sensitivity Analysis of Post-spacing and Lidar-Derived DEM on Various Stormwater Modeling Approaches", *Annual Meeting of American Society for Photogrammetry & Remote Sensing*, March 7-11, Baltimore, MA.
- 7) **Chow, T. E.**, K.F. Gaines, M.E. Hodgson, and M.D. Wilson, 2004. "Habitat and Exposure Modeling for Ecological Risk Assessment", *Annual Meeting of American Society for Photogrammetry & Remote Sensing*, May 23-28, Denver, CO.
- 6) **Chow, T. E.**, and M.E. Hodgson, 2004. "Scale Effect on Mean Slope Estimation with Airborne Laser Scanning", *Annual Meeting of Association of American Geographers*, March 14-19, Philadelphia, PA.
- 5) **Chow, T. E.**, and M.E. Hodgson, 2003. "Effects of Lidar Post-spacing and DEM Cell Size on Slope Estimation for Hydrologic Modeling", *Poster Presentation at Annual Meeting of American Society for Photogrammetry & Remote Sensing*, May 5-8, Anchorage, AK.

- 4) **Chow, T. E.**, C.M. Archor, M.E. Hodgson, and P. Bresnahan, 2002. "Stormwater Modeling in Richland County, South Carolina", *Environmental System Research Institute (ESRI) International Users Conference*, July 8-12, San Diego, CA.
- 3) Chow, T. E., M.E. Hodgson, C.M. Archor, and P. Bresnahan, 2002. "A Sensitivity Analysis of Modeled Peak Flow from Varying DEM Spatial Resolutions", *Annual Meeting of American Society for Photogrammetry & Remote Sensing*, April 19-26, Washington D.C.
- 2) **Chow, T. E.**, M.E. Hodgson, C.M. Archor, and P. Bresnahan, 2002. "A Web-Based Geographic Information System Application for Hydrology", *Annual Meeting of Association of American Geographers*, March 19-23, Los Angeles, CA.
- 1) **Chow, T. E.**, 2001. "Cholera Modeling in Peru 1991", Poster Presentation at the Summer Assembly of University Consortium of Geographic Information Science, June 20-24, Buffalo, NY.
- 2. Invited Talks, Lectures, and Presentations:
 - 25) **Chow, T. E.**, 2020. "Big data analytics in geography: Crowd dynamics in protest and beyond", Department of Geography and Resource Management, Chinese University of Hong Kong, January 9.
 - 24) **Chow, T. E.**, 2018. "Network & 3D Analysis", Urban GIS (CRP 386), School of Architecture, University of Texas at Austin, November 12.
 - 23) **Chow, T. E.**, 2018. "Data Queries", GIS in Planning (CRP 386), School of Architecture, University of Texas at Austin, June 20.
 - 22) Chow, T. E., 2017. "How many people were there? Case studies of June 4th and July 1st Demonstrations in Hong Kong", Centre for Comparative and Public Law, University of Hong Kong, June 8.
 - 21) **Chow, T. E.**, 2016. "Estimating People on the Move? HK Protest & Beyond", Department of Social Work and Social Administration, Centre for Suicide Research and Prevention, University of Hong Kong, May 23.
 - 20) **Chow, T. E.**, 2016. "Challenges and Opportunities of Population Research in Big Data Era", Centre for Comparative and Public Law, University of Hong Kong, May 19.
 - 19) **Chow, T. E.**, 2013. "Web-enabled Geography?", Department of Geography, Texas A&M University, November 1.
 - 18) **Chow, T. E.**, 2010. "Applications and Uncertainties of Lidar-derived Digital Elevation Model", Institute of Space and Earth Information Science, Chinese University of Hong Kong, July 5.

- 17) **Chow, T. E.**, 2010. "What Does the Web have to Do with Counting?", Summer Summit, Statistical Research Division U.S. Census Bureau, Washington, D.C., May 27.
- 16) **Chow, T. E.**, 2009. "What Does Geography 2.0 Mean to Geographers?", GIScience Brown Bag Talk in Department of Geography, Texas State University, October 23.
- 15) **Chow, T. E.**, 2008. "Unknown Unknowns in Geographic Information Science", Department of Geography, Texas State University, December 5.
- 14) **Chow, T. E.**, 2008. University of Michigan Flint, Department of Public Administration, Flint, MI.
- 13) **Chow, T. E.**, 2008. "Global Positioning System", Grand Blanc Community Schools, 3rd and 4th graders, Fenton, MI.
- 12) **Chow, T. E.**, 2007. University of Michigan Flint, Department of Public Administration, Flint, MI.
- 11) **Chow, T. E.**, 2006. University of Michigan Flint, Department of Public Administration, Flint, MI.
- 10) **Chow, T. E.**, 2005. Nanchang Normal University, Young Scholar Summit of the International Association of Chinese Professional of Geographic Information System, Nanchang, China.
- 9) **Chow, T. E.**, 2005. University of Michigan Flint, Department of Earth and Resource Science, Flint, MI.
- 8) **Chow, T. E.**, 2005. Central Michigan University, Department of Geography, Mount Pleasant, MI.
- 7) Chow, T. E., 2005. University of Texas Dallas, Department of Geology, Dallas, TX.
- 6) **Chow, T. E.**, 2004. University of South Carolina, Department of Civil Engineering, Columbia, SC.
- 5) **Chow, T. E.**, 2004. University of Southern Mississippi, Department of Geography, Hatiesburg, MS.
- Chow, T. E., 2004. Mississippi State University, Department of Geoscience, Hatiesburg, MS.
- 3) Chow, T. E., 2004. University of Denver, Department of Geography, Denver, CO.
- 1) J.R. Jensen, J.A. Tullis, B.C. Hadley, **Chow, T. E.**, 2004. NASA, Earth Science Enterprise (ESE), Stennis Space Center, MS.
- 1) **Chow, T. E.**, 2003. University of South Carolina, Department of Mathematics, Columbia, SC.

3. Synergistic Activities:

- Ng, M. H., **T. E. Chow**, D.W.S. Wong and C. Chan, 2021. Hong Kong Historical GIS (1900-1933). The University of Hong Kong Library. <u>https://hkh-gis.lib.hku.hk</u>. (funded by Research Grant Council of HK Government, project #: HKU 17407214).
- **Chow, T. E.**, 2021. An agent-based model to simulate crowd movement, Code. <u>https://github.com/chowte/hkrallies</u>.
- **Chow, T. E.**, and Savelyev, A., 2017. Twitter Heat Map of Hurricane Harvey, Interactive mapping. <u>https://harveymap.000webhostapp.com/index-leaflet.html</u>.
- **Chow, T. E.**, 2006. Genesee Land Map, Interactive mapping. <u>http://www.geneseelandnetwork.org/sprawl/map/</u>
- 4. Workshops:
- 5. Other (Media Coverage):
- 17) New York Times, July 3 2020, Black Lives Matter May Be the Largest Movement in U.S. History, <u>https://www.nytimes.com/interactive/2020/07/03/us/george-floyd-protests-</u> <u>crowd-size.html</u>
- 16) New York Times, July 3 2019, How A.I. Helped Improve Crowd Counting in Hong Kong Protests, <u>https://www.nytimes.com/interactive/2019/07/03/world/asia/hong-kong-protest-crowd-ai.html</u>
- 15) MingPao News, July 2 2019, [][] AI [] [][][] 26.5 [] [][][][][] (translated title: The manual and AI approach counted the July 1st Rally with 265k, about half of the organizer and more than 40% than the police figure), <u>http://www.mingpaocanada.com/TOR/htm/News/20190702/hk-gae1_r.htm</u>
- 14) MingPao News, July 2 2019, [[[][][]] AI [[][]] (translated title: Adding a new monitoring station at Lockhart Rd: AI counted 30 minutes after a new location), https://news.mingpao.com/pns/%E8%A6%81%E8%81%9E/article/20190702/s00001/15 62006760861/%E6%80%A5%E8%A8%AD%E9%A7%B1%E5%85%8B %E9%81%93%E9%BB%9E%E7%AE%97%E4%BD%8D-ai %E8%A8%88%E5%B0%91%E5%8D%8A%E5%B0%8F%E6%99%82
- 13) SingTao News, July 2 2019, [[][] 26.5 [] (translated title: July 1st Rally count: Scholars estimated 265k), <u>https://www.singtaousa.com/home/13-</u> <u>%E9%A6%99%E6%B8%AF/2404402-%E4%B8%83%E4%B8%80%E9%81%8A</u> <u>%E8%A1%8C%E2%80%82%E5%AD%B8%E8%80%85%E4%BC%B0%E7%AE</u> <u>%9726.5%E8%90%AC%E4%BA%BA/?fromG=1</u>

- 12) Super Media HK, July 2 2019, [] AI [] [] [] [] [26.5] (translated title: HKU and AI Team released preliminary July 1st Rally count: 265k), <u>http://www.supermedia.hk/34393/%E6%B8%AF%E5%A4%A7ai%E5%9C</u> <u>%98%E9%9A%8A%E5%85%AC%E5%B8%83%E5%88%9D%E6%AD%A5%E4%BA</u> <u>%BA%E6%95%B8%EF%BC%9A26-5%E8%90%AC/</u>
- 11) MingPao News, July 1 2019, [] AI [] [] [] [] [26.5] (translated title: Preliminary count by the HKU and AI Team: 265,000), <u>https://news.mingpao.com/ins/%E6%B8%AF</u> <u>%E8%81%9E/article/20190701/s00001/1561978210430/%E3%80%90%E4%B8%83%E</u> <u>4%B8%80%E9%81%8A%E8%A1%8C%E3%80%91%E6%B8%AF%E5%A4%A7ai</u> <u>%E5%9C%98%E9%9A%8A%E5%85%AC%E5%B8%83%E5%88%9D%E6%AD</u> %A5%E4%BA%BA%E6%95%B8-26-5%E8%90%AC
- 10) HK01 News, July 1 2019, []______ AI []_____ AI []_____ (translated title: Scholars launched a citizen-science project "I Go There I Count" with AI technology to count rally),

https://www.hk01.com/18%E5%8D%80%E6%96%B0%E8%81%9E/346856/%E4%B8 %83%E4%B8%80%E9%81%8A%E8%A1%8C-%E5%AD %B8%E8%80%85%E9%82%80%E5%B8%82%E6%B0%91-%E8%87%AA %E5%B7%B1%E9%81%8A%E8%A1%8C%E8%87%AA%E5%B7%B1%E6%95%B8-%E4%BB%A5ai%E6%8A%80%E8%A1%93%E8%A8%88%E7%AE%97%E4%BA %BA%E6%AC%A1

- 9) STHeadline News, July 1 2019, [][][][][][][][][]26.5 [][][][]21.5 [][(translated title: Scholars from HK and US estimated 265k; Lui estimated 215k), https://hd.stheadline.com/news/realtime/hk/1534828/%E5%8D%B3%E6%99%82-%E6%B8%AF%E8%81%9E-%E4%B8%83%E4%B8%80%E5%9B%9E%E6%AD %B8-%E6%B8%AF%E7%BE%8E%E5%AD %B8%E8%80%85%E7%B5%B1%E8%A8%88%E9%81%8A%E8%A1%8C%E4%BA %BA%E6%95%B826-5%E8%90%AC-%E9%9B%B7%E9%BC%8E %E9%B3%B4%E4%BC%B0%E7%AE%9721-5%E8%90%AC%E4%BA%BA
- 8) HKET, July 1 2019, [[[[[]]]]] 55 [[] [[[[]]]]] 19 [] (translated title: Organizers announced an attendance of 550k for July 1st Rally; the Police estimated a peak of 190k), https://topick.hket.com/article/2388911/%E3%80%90%E5%8F%8D %E9%80%81%E4%B8%AD%E3%80%91%E6%B0%91%E9%99%A3%E5%85%AC %E5%B8%83%E4%B8%83%E4%B8%80%E9%81%8A %E8%A1%8C55%E8%90%AC%E4%BA%BA%E3%80%80%E8%AD %A6%E6%96%B9%E6%8C%87%E9%AB%98%E5%B3%B0%E6%9C%9F%E4%BA %BA%E6%95%B819%E8%90%AC
- 7) Apple Daily News, July 1 2019, [[] AI [[] [] [] [] (translated title: Scholars and AI company collaborated to count rally, <u>https://hk.news.appledaily.com/local/daily/article/20190701/20717581</u>
- 6) Bastille Post, July 1 2019, []___ 21.5 []____ 21.5 []____ 26.5 [(translated title: Lui estimated 215k attending the July 1st Rally; Scholars from HK and US estimated 265k, <u>https://www.bastillepost.com/hongkong/article/4646717-</u> %E3%80%90%E4%B8%83%E4%B8%80%E5%9B%9E%E6%AD

<u>%B8%E3%80%91%E6%B8%AF%E7%BE%8E%E5%AD</u> <u>%B8%E8%80%85%E7%B5%B1%E8%A8%88%E9%81%8A%E8%A1%8C%E4%BA</u> <u>%BA%E6%95%B826-5%E8%90%AC-%E9%9B%B7%E9%BC%8E</u> <u>%E9%B3%B4%E4%BC%B0?variant=zh-tw?fromG=1</u>

- 4) MingPao News, June 30 2019, AI (translated title: Scholars from Hong Kong University and Texas State University collaborated with a tech company to conduct July 1st Rally scientifically with manual and AI approaches), <u>http://www.mingpaocanada.com/Tor/htm/News/20190630/HK-gbc1_r.htm</u>
- 3) HK01 News, June 30 2019, [[][][][][][] AI [[][][][][][][][(translated title: Scholars collaborated with a tech company to count rally with AI), https://www.hk01.com/%E7%A4%BE%E6%9C%83%E6%96%B0%E8%81%9E/34651 8/71%E9%81%8A%E8%A1%8C-%E6%B8%AF%E5%A4%A7%E5%AD %B8%E8%80%85%E8%88%87%E7%A7%91%E6%8A%80%E5%85%AC%E5%8F %B8%E5%90%88%E4%BD%9C-ai%E6%8A%80%E8%A1%93%E5%8A %A9%E9%BB%9E%E7%AE%97%E9%81%8A%E8%A1%8C%E4%BA%BA %E6%95%B8

6. Works in Preparation:

[Note: ^ indicates a student author]

- Pasley, N. K., **T. E. Chow***, B. Schwarz, and N. Currit, In preparation, Impacts of urban growth upon aquifer recharge. A case study of Edwards Aquifer in Central Texas, To be submitted to *Urban Water Journal*.
- Alyaqout*, A., **T. E. Chow**, and A. Savelyev, In review, Assessing the quality of Volunteered Geographic Information (VGI) for flood monitoring. A case study of Hurricane Harvey in Harris County, Texas, Submitted to *Natural Hazards*.

- Yang[^], M., Y. Lin, **T. E. Chow**, M. P. Pignone, F. B. Zhan, In preparation, Spatial accessibility to primary care in Texas and its association with 13 health outcomes, to be submitted to *Preventive Chronic Diseases*.
- C. Grants and Contracts
- 1. Funded External Grants and Contracts: [Note: Chow was the sole Principal Investigator (PI) unless otherwise noted]
- 2015-2017 "GRF: Mapping Colonial Justice of Early 20th Century Hong Kong (1900-1941): A Historical GIS Study", Hong Kong Research Grants Council, Senior Personnel (P.I., Ng), \$125,511, 01/01/2015 – 12/31/2017.
- 2014-2016 "RAPID: Geospatial Resources, Materials and Tools for STEM Teacher Preparation", National Science Foundation (NSF), Senior Personnel (P.I., Solem), \$200,000, 09/01/2014 – 03/31/2016 (Award No. BCS-1451203).
- 2010-2011 "What Does the Web Has to Do with Census?", U.S. Bureau of the Census, \$1,000.
- 2. Submitted, but not Funded, External Grants and Contracts: [Note: Chow was the sole Principal Investigator (PI) unless otherwise noted]
- 2022 "Collaborative Research: Integrated and Personalized Flood Monitoring with Multisource Data", National Science Foundation (NSF), CMMI-HDBE, \$985,330, 01/01/2023 12/31/2025.
- 2022 "Determining if concurrent inhalation exposure and traumatic brain injury cause increased deleterious impacts", Department of Defense (DoD), Congressionally Directed Medical Research Program (CDMRP), Defense Medical Research and Development CSI Restoral, Senior Personnel (P.I.: Dr. Jack Hutcheson), \$850,000, 06/01/2023 – 5/31/2025.
- 2022 "In Situ modeling of burn pit exposures to inform inhalation toxicological assessment in multi- organoid and rat models", Department of Defense (DoD), Congressionally Directed Medical Research Program (CDMRP), Toxic Exposures Research Program (TERP), (Partnering P.I.: Dr. Jack Hutcheson) \$574,345, 01/01/2024 12/31/2026.
- 2022 "Geographic modeling of chronic exposure to lignite coal plants for in vivo and in vitro inhalation toxicological assessment of US Service Members based in Kosovo", Department of Defense (DoD), Congressionally Directed Medical Research Program (CDMRP), Toxic Exposures Research Program (TERP), (Partnering P.I.: Dr. Jack Hutcheson) \$753,351, 01/01/2024 12/31/2026.
- 2022 "Gaussian Dispersion Modeling of Battlefield Point-Source Exposures to Inform Inhalatory Toxicological Assessment in Multi-Organ on a Chip (MOC) Models", Department of Defense (DoD), Congressionally Directed Medical Research Program (CDMRP), Peer Reviewed Medical Research Program Discovery Award, Senior Personnel (P.I.: Dr. Jack Hutcheson), \$199,270.

- 2021 "Geospatial Storytelling of 1956 Algeria Strike", National Endowment of Humanities (NEH), Faculty Award for HSI, PI, \$21,250.
- 2021 "Improve Traffic Analysis and Mobility Modeling Using Information and Communication Technologies", Texas Department of Transportation (TxDOT), Research & Technology Implementation PS 22-256, Co-PI (PI: Yihong Yuan).
- 2021 "Define a Statewide Plan for a Sustainable Real-Time Travel Time Network for Texas Hurricane Evacuations and Safe Citizen Return", Texas Department of Transportation (TxDOT), Research & Technology Implementation PS 22-161, Co-PI (PI: Zhijie Dong).
- 2018 "Using a Web population survey to gain insights into the effect of the new citizenship question on the 2020 US Census", Russell Sage Foundation.
- 2018 "Spatial Data Science and Health Geographic Core for Cancer Research and Prevention", Cancer Prevention Research Institute of Texas (CPRIT), Co-PI (PI: Benjamin Zhan).
- 2018 "A Cost-effective Approach to Complementing Census Data", U.S. National Science Foundation (NSF).
- 2016 "The Efficacy of Location-Based Social Media for Modeling Human Mobility: Representativeness, Reliability, and Rhythms across Geographies", U.S. National Science Foundation (NSF).
- 2015 "The Efficacy of Location-Based Social Media for Modeling Human Mobility: Representativeness, Reliability, and Rhythms across Geographies", U.S. National Science Foundation (NSF).
- 2015 "NSF-BIGDATA: IA: Space-Time Integration of Big Data for Population-Infrastructure Informatics during Disaster", U.S. National Science Foundation (NSF).
- 2015 "Center of Excellence: Spatial Strategies for Environmental Health Disparity Reduction", U.S. National Institute of Health (NIH), Co-PI (PI: Benjamin Zhan).
- 2014 "NSF-SEES: A Space-Time Emergency Response System for Building Disaster Resilient Communities", U.S. National Science Foundation (NSF).
- 2014 "Suitability of Social Media During Emergency Response and Recovery", U.S. Department of Homeland Security (DHS).
- 2014 "(Near) Real-time Evaluation of Personal Air Pollution Exposure and Health Risk (REPAPER)", U.S. Environmental Protection Agency (EPA), Co-PI (PI: Yongmei Lu).
- 2014 "A Web Portal to Monitor Human Dynamics for Emergency Response", National Geospatial-Intelligence Agency (NGA).
- 2013 "Spatial Uncertainty of Differential Census Coverage for Health Studies", National Institutes of Health (NIH).

- 2013 "Collaborative Research: Service Network: Organizing, Indexing, and Recommending Web-scale Information Services", National Science Foundation (NSF).
- 2013 "Geospatial Resources, Materials and Tools for Improving STEM Teacher Preparation", National Science Foundation (NSF).
- 2012 "Census 2.0 A cost-effective approach to complementing Census data", National Science Foundation (NSF) Social, Behavioral & Economic Sciences: Geography and Spatial Science.
- 2012 "Doctoral Dissertation Research: An Agent-Based Irregular Automata Model of Urban Land Use Dynamics", National Science Foundation (NSF) – Social, Behavioral & Economic Sciences: Geography and Spatial Science Doctoral Dissertation Research Improvement Grant. (Co-PI: K. R. Dahal).
- 2012 "Accuracy Assessment of Web Demographics", Texas Census Research Data Center (TXCRDC): Proposal Development Grants Cycle I.
- 2011 "Census 2.0 A cost-effective approach to complementing Census data", National Science Foundation (NSF) Social, Behavioral & Economic Sciences: Geography and Spatial Science.
- 2011 "Characterization of fuel parameters and ember transport mechanisms for grassland fire spread modeling", Joint Fire Science Program (JFSP).
- 2011 "Using clapper rails as an indicator species of estuarine marsh health: a model organism for high and low level organic chemical contamination", Gulf of Mexico Research Initiative.
- 2011 "A remote sensing SDSS for monitoring land-sea environment", Gulf of Mexico Research Initiative.
- 2011 "Census 2.0 A Web-based Survey to Supplement U.S. Census", National Science Foundation (NSF) – Social, Behavioral & Economic Sciences: Geography and Spatial Science.
- 2010 "Census 2.0 An Innovative Supplementary Survey to the Decennial Census", U.S. National Science Foundation (NSF) Social, Behavioral & Economic Sciences: Geography and Spatial Science.
- 2008 "Acquisition of Hardware/Software for Research in Error Propagation?", U.S. National Science Foundation (NSF) Earth Science: Instrumentation and Facilities.
- 3. Funded Internal Grants and Contracts: [Note: Chow was the sole Principal Investigator (PI) unless otherwise noted]
- 2023 "Geo-localization of Crowdsourced Images Using GeoAI for Flood Monitoring", Research Enhancement Program, Texas State University, \$8,000.

- 2019 "Get the Big Pictures: Flood Analytics Using Big Multimedia Data", Multidisciplinary Internal Research Grant (MIRG), Texas State University, \$29,916.
- 2013 "Exploring the Post-Disaster Tweets for Damage Assessment", Research Enhancement Program, Texas State University, \$8,000.
- 2008 "Putting UM-Flint onto the Map?", Research and Creative Activity Award: Phase II Funding, University of Michigan Flint, \$500.
- 2008 "Putting UM-Flint onto the Map?", Research and Creative Activity Award, University of Michigan Flint, \$8,895.
- 2008 Faculty International Travel Awards, University of Michigan Flint, \$2,000.
- 2007 "Towards Creating a Digital UM-Flint", Research and Creative Activity Award, University of Michigan Flint. \$12,245.
- 2006 "Accuracy Assessment of Contour-derived Elevation and Terrain Slope", Research and Creative Activity Award, University of Michigan Flint, \$18,533.
- 3. Student Internal/External Grants and Contracts:
 - Advisor, Dede-Bamfo, N., 2012-2013. Research travel grant, West African Research Centre (WARC), \$3,000.
- 4. Submitted, but not Funded, Internal Grants and Contracts:
- 2017 "Communication Accessibility and Social Media Landscapes of Austin, Texas", Research Enhancement Program of Texas State University.
- 2016 "Communication Accessibility and Social Media Landscapes of Austin, Texas", Research Enhancement Program of Texas State University.
- 2010 "Accuracy and Sensitivity of Fire Growth Simulation in Central Texas", Research Enhancement Program of Texas State University.
- 2009 "Census 2.0 a Supplementary Survey to Decennial Census" Research Enhancement Program of Texas State University.
- 5. Student Internal/External Grants and Contracts:
 - Advisor, Dede-Bamfo, N., 2012-2013. Research travel grant, West African Research Centre (WARC), \$3,000.
- 6. Pending Internal/External Grants and Contracts: [Note: Chow was the sole Principal Investigator (PI) unless otherwise noted]

- 2024 "Collaborative Research: Integrated and Personalized Flood Monitoring with Multisource Data", National Science Foundation (NSF), CMMI-HDBE, \$985,330, 01/01/2023 12/31/2025.
- D. Fellowships, Awards, Honors:
- 2012 Dean's Award for Excellence in Scholarly/Creative Activities, College of Liberal Arts, Texas State University.
- 2011 Travel Grant, Center for Spatial Studies, Department of Geography, University of California at Santa Barbara, \$600. How Does Hydrologic Enforcement Affect Lidar-derived DEM
- 2005 Travel Grant, Chinese Professional in Geographic Information Systems, \$800.
- 2003 Honorable mention of Lovingood Award, University of South Carolina.

IV. SERVICE

A. University:

Fall 2019	Panel, Data Management Panel Discussion, Technology Enhanced Infrastructure (TEI) Summit, Texas State University, September 5 th , 2019.		
Spring 2017	Member, 2017-2023 University Plan Read-Across Committee, Texas State University.		
Winter 2008	Member, Scholarships, Awards, and Special Events Committee, University of Michigan – Flint.		
2006	Member, Extended Learning and Service Committee, University of Michigan – Flint.		
B. Departmental:			
2023-2024	Chair, Online Program Development Committee, Texas State University.		
2018-2022	Chair, Recruitment & Communication Committee, Texas State University.		
2020-2023	Member, Undergraduate Committee, Texas State University.		
2021-2022	Member, Meadows Chair in Water Conservation Search Committee, Texas State University.		
Fall 2021	Faculty Advisor, Society of Geographic Information Science (SOGIS), Texas State University.		
2020-2021	Member, Environmental Geographer Search Committee, Texas State University.		

- 2018-2020 Member, Graduate Committee, Texas State University.
- 2017-2018 Chair, Geomorphology Search Committee, Texas State University.
- 2017-2018 Member, Instructor Review Committee, Texas State University.
- 2016-2017 Chair, Recruitment & Communication Committee, Texas State University.
- 2016-2017 Member, Evaluation Committee, Texas State University.
- 2014-2015 Member, GPP Faculty Search Committee, Texas State University.
- 2014-2015 Member, Climatology Faculty Search Committee, Texas State University.
- 2012-2015 Faculty Co-advisor, Graduate Student Research Symposium, Texas State University.
- 2010-2015 Faculty Advisor, Society of Geographic Information Science (SOGIS), Texas State University.
- 2014 Member, Personnel Committee Review Subcommittee, Texas State University.
- 2013-2014 Member, GIScience Faculty Search Committee, Texas State University.
- 2012-2013 Member, Undergraduate Committee, Texas State University.
- 2011-2012 Member, Evaluation Committee, Texas State University.
- 2011-2012 Faculty Advisor, Robby's Ride around the World, Texas State University.
- 2011-2012 Member, Physical Geographer Search Committee, Texas State University.
- 2010-2011 Member, Presidential Upper Level Scholarship Committee, Texas State University.
- 2010-2011 Member, Scholarships/Awards Committee, Texas State University.
- 2009-2011 Member, Web Site Committee, Texas State University.

C. Community:

2009-2010

Feb 6, 2008 Host, "Improving Michigan's Access to Geographic Information Networks (IMAGIN) Emerging Technologies Seminar - Lidar", University of Michigan – Flint.

D. Professional:

[Note: number of review is in parenthesis]

Associate Editor of the Urban Life Journal

Sept 2023 – Aug 2026

Review Board of the Research Grants Council (RGC) under the Hong Kong SAR government Feb 2023 – Jan 2025

Treasurer of the University Consortium of Geographic Information Science (UCGIS)

2018-Present

Committee Member of the Membership Model Task Force of UCGIS

2019-2020

Committee Member of the Membership Committee of UCGIS

2018-2020

Committee Member of the Research Grant Committee at the Ameri	ican Association of
Geographers (AAG)	2015-2018
Board of Directors at the International Association of China Profe	ssional in Geographic
Information Science (CPGIS)	2014-2016
Chair of International Association of China Professional in Geogra	aphic Information Science
(CPGIS) Election Committee	2015
Chair of International Association of China Professional in Geogra	aphic Information Science
(CPGIS) Newsletter Committee	2012-2014
Reviewer in Grant Proposal/Report National Science Foundation	2009, 2010, 2012, 2022
Research Grant Council, HKSAR	2021(2), 2022, 2023 (5)
Safe-D National UTC	2018
External Reviewer in Tenure & Promotion Promotion to Professor of Professor Yuxia Huang at the Depa Sciences at TAMUCC Tenure & Promotion of Professor Michael Starek at the Depa Sciences at TAMUCC	2023
Reviewer in Peer-reviewed Journals201Cartography and Geographic Information Science201Computers, Environmental and Urban SystemsEnvironmental Hazards	10, 2018, 2019, 2022, 2023 2014, 2015, 2017, 2019 2021

Geographic Information Science and Remote Sensing Geomatica Geomatics, Natural Hazards and Risk IEEE Access	2011, 2012, 2013 2019 2023 2018
International Journal of Geographic Information Science	
2008 (2), 2010, 2011, 2012 (2), 2013,	2015, 2016, 2023
International Journal of Information Technology & Decision Making	2010
International Journal of Photogrammetry and Remote Sensing	2012
International Journal of Remote Sensing	2009
International Journal of Digital Earth	2015
Journal of Applied Geography	2009
Journal of Environmental Management	2006
Journal of Hazards Material	2008
Journal of Medical Internet Research	2014
Natural Hazards Review	2007, 2020
Papers in Applied Geography	2021
Transactions in GIS	2015

Reviewer in Peer-reviewed Book Chapter

Chapter 22 "The role of VGI as a compilation tool for building and maintaining map databases used in navigation and location applications" in Springer Book Series Volume on "Volunteered Geographic Information: New development and applications" 2011

Chapter 5 "Advanced Web-based GIS technologies for public health" in ISPRS Book Series Volume on "Advances in Web-based GIS, Mapping Services and Applications" 2009

Chapter 12 "A geospatial Web application to map observations and opinions in environmental planning" in ISPRS Book Series Volume on "Advances in Web-based GIS, Mapping Services and Applications" 2009

Reviewer in Text Book/Monograph

Harvey, F., 2014, <u>A Primer of GIS: Fundamental Geographic and Cartographic Concepts</u>, 2nd Edition. Guilford Press.

- E. Organizations
- 1. Honorary:

2. Professional:

Member of

Association of American Geographers (AAG) American Society of Photogrammetry and Remote Sensing (ASPRS) Chinese Professional in Geographic Information Systems (CPGIS) F. Services Honors and Awards: