N. Ken Trần, PhD

Personal Information

Residence	San Francisco, CA
Website	kentranz.github.io
Research Portfolio	Google Scholar

Work Experience

2021–Now	**Policy Associate** at Acumen, LLC
2021	**Data Operations Manager** at Public Health Institute
2020	**Adjunct Professor** at University of San Francisco
2018–2020	**Researcher** at Canadian Mental Health Association
2016	**Graduate Student Researcher** at University of Waterloo
2015–2016	**Information System Analyst** at FPT Software
2014–2015	**Manufacturing Supervisor** at Applied Medical Resources Corp.
Before 2014	**Student Staff** at Western Washington University **Intern** at Smithsonian Institution

Education

2020	**PhD Public Health & Health Systems** from University of Waterloo Specialization: Health Informatics
2014	**MS Bioengineering** with <u>Honors</u> from California Polytechnic State University - San Luis Obispo
2014	**MBA** with <u>Honors</u> from California Polytechnic State University - San Luis Obispo
2012	**BS Biology & Mathematics** from Western Washington University

Journal Publications

J7. N. Jalali, **N.K. Tran**, A. Sen, and P.P. Morita. Identifying the socioeconomic, demographic, and political determinants of social mobility and their effects on COVID-19 cases and deaths: evidence from U.S. counties. *JMIR Infodemiology*, 2022. (in press)

J6. G. Geri, L. Ferrer, **N.K. Tran**, L.A. Celi, M. Jamme, J. Lee, and A. Vieillard-Baron. Cardio-pulmonary-renal interactions in ICU patients. Role of mechanical ventilation, venous congestion and perfusion deficit on worsening of renal function: Insights from the MIMIC-III database. *Journal of Critical Care*, 2021.**[full-text]**

J5. M. Gardiner, A. DeMuy, and **N.K. Tran**. Here4HealthCare: A response to the emerging mental health crisis of the frontline healthcare workforce. *Canadian Journal of Community Mental Health*, 2021. **[full-text]**

J4. **N. Tran**, J.W. Poss, C. Perlman, and J.P. Hirdes. Case-mix classification for mental health care in community settings: A scoping review. *Health Services Insights*, 12, 2019. **[full-text]**

J3. I.E.R. Waudby-Smith, **N. Tran**, J. Dubin and J. Lee. Sentiment in nursing notes as an indicator of out-of-hospital mortality in intensive care patients. *PloS One*, 2018. **[full-text]**

J2. B.Y. Kim, A. Sharafoddini, **N. Tran**, E. Wen, and J. Lee. Consumer mobile apps for potential drug-drug interaction check: Systematic review and content analysis using the mobile app rating scale (MARS). *JMIR mHealth and uHealth*, 2018. **[full-text]**

J1. **N. Tran** and J. Lee. Online reviews as health data: Examining the association between availability of health care services and patient star ratings exemplified by the Yelp academic dataset. *JMIR Public Health and Surveillance*, 2017. **[full-text]**

Conference Papers

C1. **N. Tran** and J. Lee. Using multiple sentiment dimensions of nursing notes to predict mortality in the intensive care unit. *Proceedings of the IEEE-EMBS International Conference on Biomedical and Health Informatics*, 2018. **[full-text]**

Peer-Reviewed Abstracts

A4. **N. Tran** and C. Perlman. Utility of machine learning techniques for predicting psychiatric readmissions. *Annual Scientific Symposium of the Canadian Academy of Psychiatric Epidemiology*, 2019.

A3. G. Geri, L. Ferrer, **N. Tran**, M. Jamme, J. Lee, and A. Vieillard-Baron. Impact of mechanical ventilation setting on the occurrence of acute kidney injury in ICU patients: insights from the MIMIC-III database. *Congrès Réanimation de la Société de Réanimation de Langue Française (SRLF)*, 2019. **[full-text]**

A2. B.Y. Kim, A. Sharafoddini, **N. Tran**, E. Wen, and J. Lee. A review of the accuracy and comprehensiveness of the pharmaceutical information within drug to drug interaction mobile applications. *Pharmacy Research Day at University of Waterloo*, 2018. **[full-text]**

A1. **N. Tran** and B. Miner. Decision making in phenotypic plasticity response to predatory crabs by marine snails. *Western Washington University Scholars Week Conference*, 2012. (Best Poster Award)

Theses

T2. **N. Tran**. Predicting resource use of community mental health services at the transition from inpatient psychiatry (PhD thesis). *University of Waterloo*, 2020. **[full-text]**

T1. **N. Tran**. The effect of fiber depth on estimation of peripheral nerve fiber diameter using group delay and simulated annealing optimization (Master's thesis). *California Polytechnic State University - San Luis Obispo*, 2014. **[full-text]**

Invited Presentations

P7. **N.K. Tran**. Learning Health System with Data Science. *Data Science Seminar at University of San Francisco*. February 19, 2021.

P6. **N.K. Tran**. Research in practice (moderator). *Big Data & AI Toronto*. June 12, 2019.

P5. **N.K. Tran**. Introduction to machine learning. *interRAI Canada GROUPies Meeting*. December 18, 2019.

P4. **N.K. Tran**. Effects of flexible assertive community treatment teams on inpatient psychiatric readmission. *Executive Meeting of Canadian Mental Health Association - Waterloo Wellington*. August 7, 2019.

P3. **N.K. Tran**. Predicting resource use of community mental health services at the transition from inpatient psychiatry. *October Ethics Committee Meeting of Canadian Mental Health Association - Waterloo Wellington*. October 29, 2018.

P2. B.Y.B. Kim and **N.K. Tran**. Primer on reviewing mobile apps. *Health Data Science Lab at University of Waterloo*, 2017.

P1. **N.K. Tran**. Yelp Data as Health Data. *Health Data Science Lab at University of Waterloo*. October 27, 2016.

Peer Reviewer

2022	Journal of the American Medical Informatics Association
2017–2021	Journal of Medical Internet Research
2020	PLoS ONE

2020	JMIR Mental Health
2018	JMIR Medical Informatics

Funding History (Total Awarded ≈ $236,000)

2019	**Research Assistantship** from University of Waterloo 8,160 CAD, awarded but declined due to exceeding limit of concurrent awards
2018	**Travel Award** from University of Waterloo 800 CAD
2017	**Graduate Experience Award** from University of Waterloo 2,348 CAD
2016–2020	**Ontario Trillium Scholarship** from Government of Ontario, Canada 160,000 CAD
2016	**Research Assistantship** from University of Waterloo 7,479 CAD
2016	**International Doctoral Student Award** from University of Waterloo 47,000 CAD approx., awarded but declined due to exceeding limit of concurrent awards
2013–2014	**Out-of-State Tuition Waiver Award** from California Polytechnic State University - San Luis Obispo 10,000 USD approx.
2011	**Undergraduate Research Grant** from Western Washington University 350 USD

Teaching

2020	**Instructor**, University of San Francisco MSDS 597: Data Management
2018	**Volunteer Mentor**, Canada Learning Code Introductory programming workshops in HTML/CSS
2017	**Volunteer Mentor**, Canada Learning Code Introductory programming workshops in Python
2017	**Teaching Assistant**, University of Waterloo HLTH 473/619: Research Methods in Health Informatics
2011-2012	**Teaching Assistant**, Western Washington University BIOL 205 Lab: Introduction to Cellular & Molecular Biology