HAMID MANSOOR

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EDUCATION

PhD in Computer Science, Worcester Polytechnic Institute, MA USA **August 2022**
Advisors: Prof. Emmanuel Agu and Prof. Elke Rundensteiner
MS in Computer Science, Tufts University, MA USA **May 2016**
BS in Computer Science, Tufts University, MA USA **Dec 2014**

IMMIGRATION STATUS

Permanent Resident of Canada

SKILLS

Programming Languages: JavaScript, TypeScript, Java, Python, R, C++, C, C#, CSS, SQL
Web Frameworks and libraries: Node.js, D3.js, jQuery, Angular.js, React.js, Flask
Tools: Android Studio, Tableau, Git

WORK EXPERIENCE

University of Victoria, VIXI Lab, Victoria BC, Canada **Sep 2022 - Present**
Postdoctoral Researcher under Prof. Miguel Nacenta's supervision

- Working on multiple projects to address the gaps between textual and graphical representations of ideas
- Designing and developing multiple tools and studies for understanding the effectiveness of graphically representing text

University of Victoria, Computer Science Department, Victoria BC, Canada **Jan 2023 - August 2023**
Sessional Instructor for CSC 130 - World Wide Web and Mobile Applications and SENG 310 - HCI

- Teaching an introduction course in web development and front end interface design for non-specialists
- Covering basic interface development topics like HTML, CSS, JavaScript, jQuery and dynamic web content
- Conducting three lectures per week for more than 100 students and leading a team of teaching assistants to manage labs, assignments, projects and midterms

Worcester Polytechnic Institute, Dept of Computer Science, Worcester MA, USA **May 2019 - Aug 2022**
Graduate Research Assistant

- Researcher for the US Department of Defense funded Warfighter Analytics using Smartphones for Health (WASH) project
- Developed interactive data visualization web applications using HTML, jQuery and D3.js to enhance analysis of complex, multivariate data gathered from smartphones
- Developed an Android app to gather smartphone sensor data for continuous health monitoring

Worcester Polytechnic Institute, Dept of Computer Science, Worcester MA, USA **Aug - May, 2016 - 2019**
Graduate Teaching Assistant

- Courses: Data Visualization, Web Eng, Mobile and Ubiquitous Computing, HCI and Systems Programming
- Graded assignments and exams and held office hours to assist students with coursework

Pacific Northwest National Labs, Richland WA, USA **June 2018 - Aug 2018**
National Security Program, PhD Intern

- Developed a biosurveillance application as part of a team for the US Department of Defense
- Worked with expert epidemiologists to design smartphone interfaces and display educational information like disease symptoms, properties, global distribution etc. for infectious diseases

Worcester Polytechnic Institute, Dept of Computer Science, Worcester MA, USA **May 2017 - Aug 2017**
Graduate Research Assistant

- Worked on data visualization literacy and graphical perception projects using jQuery, D3.js and Node.js

Tufts University Center for Engineering Education Outreach (CEEO), Medford MA, USA **Sep 2015 - May 2016**
Graduate Research Assistant

- Implemented interfaces for several collaborative web interfaces for teachers to monitor their students' progress using Meteor and D3.js

Imprivata, Inc. Lexington MA, USA **Jan 2015 - Aug 2015**
Software Engineer

- Worked on a team to develop Cortext, a HIPAA (USA healthcare privacy laws) compliant messaging app for healthcare providers using Google Web Toolkit and Backbone.js

PUBLICATIONS

2023

- Scott Bateman, Carl Gutwin, **Hamid Mansoor**, Miguel Nacenta, Michael van der Kamp, Mykyta Baliesnyi, Kolton Gagnon, and Jesse Rollheiser. "WAMS: A Flexible API for Visual Workspaces Across Multiple Surfaces." *Proceedings of the ACM on Human-Computer Interaction* 7, no. EICS (2023): 1-40.
- **Hamid Mansoor**, Walter Gerych, Abdulaziz Alajaji, Luke Buquicchio, Kavin Chandrasekaran, Emmanuel Agu and Elke Rundensteiner. "Population-Level Visual Analytics of Smartphone Sensed Health and Wellness Using Community Phenotypes." *The 11th IEEE International Conference on Healthcare Informatics (ICHI 2023)*
- **Hamid Mansoor**, Walter Gerych, Abdulaziz Alajaji, Luke Buquicchio, Kavin Chandrasekaran, Emmanuel Agu and Elke Rundensteiner. "Exploratory Data Analysis of Population Level Smartphone-Sensed Data" *Computer Vision, Imaging and Computer Graphics Theory and Applications. VISIGRAPP 2021. Communications in Computer and Information Science, vol 1691. Springer, Cham.*
- **Hamid Mansoor**, Walter Gerych, Abdulaziz Alajaji, Luke Buquicchio, Kavin Chandrasekaran, Emmanuel Agu, Elke Rundensteiner and Angela Incollingo Rodriguez. "INPHOVIS: Interactive Visual Analytics for Smartphone-Based Digital Phenotyping." *Elsevier Visual Informatics Journal, January 2023*

2022

- Walter Gerych, Thomas Hartvigsen, Luke Buquicchio, Abdulaziz Alajaji, Kavin Chandrasekaran, **Hamid Mansoor**, Elke Rundensteiner, Emmanuel Agu. "Positive Unlabeled Learning with a Sequential Selection Bias." *Proceedings of the 2022 SIAM International Conference on Data Mining (SDM). Society for Industrial and Applied Mathematics*.

2021

- Walter Gerych, Harrison Kim, Joshua DeOliveira, MaryClare Martin, Luke Buquicchio, Kavin Chandrasekaran, Abdulaziz Alajaji, **Hamid Mansoor**, Elke Rundensteiner, Emmanuel Agu. "GAN for Generating User-Specific Human Activity Data From An Incomplete Training Corpus." *IEEE International Conference on Big Data (Big Data), pp. 4705-4714, 2021*.
- Luke Buquicchio, Walter Gerych, Abdulaziz Alajaji, Kavin Chandrasekaran, **Hamid Mansoor**, Thomas Hartvigsen, Elke Rundensteiner, Emmanuel Agu. "Variational Open Set Recognition (VOSR)." *IEEE International Conference on Big Data (Big Data), pp. 994-1001, 2021*.
- Luke Buquicchio, Walter Gerych, Abdulaziz Alajaji, Kavin Chandrasekaran, **Hamid Mansoor**, Elke Rundensteiner, Emmanuel Agu. "Few-Shot Classification for Human Context Recognition Using Smartphone Data Traces." *20th IEEE International Conference on Machine Learning and Applications (ICMLA), pp. 345-350, 2021.*
- **Hamid Mansoor**, Walter Gerych, Abdulaziz Alajaji, Luke Buquicchio, Kavin Chandrasekaran, Emmanuel Agu, and Elke Rundensteiner. "ARGUS: Interactive Visual Analysis of Disruptions in Smartphone-Detected Bio-Behavioral Rhythms." *Visual Informatics 5.3 (2021): 39-53.*
- **Hamid Mansoor**, Walter Gerych, Abdulaziz Alajaji, Luke Buquicchio, Kavin Chandrasekaran, Emmanuel Agu, and Elke Rundensteiner. "Visual Analytics of Smartphone-Sensed Human Behavior and Health." *IEEE Computer Graphics and Applications (CG & A) 41, no. 3 (2021): 96-104.*
- Abdulaziz Alajaji, Walter Gerych, Luke Buquicchio, Kavin Chandrasekaran, **Hamid Mansoor**, Emmanuel Agu, and Elke A. Rundensteiner. "Smartphone Health Biomarkers: Positive Unlabeled Learning of In-the-Wild Contexts." *IEEE Pervasive Computing 20, no. 1 (2021): 50-61*.

- **Hamid Mansoor**, Walter Gerych, Abdulaziz Alajaji, Luke Buquicchio, Kavin Chandrasekaran, Emmanuel Agu, and Elke Rundensteiner. "PLEADES: Population Level Observation of Smartphone Sensed Symptoms for In-The-Wild Data Using Clustering." 16*th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications, VISIGRAPP (3: IVAPP) 2021*

2020

- **Hamid Mansoor** , Walter Gerych, Luke Buquicchio, Abdulaziz Alajaji, Kavin Chandrasekaran, Emmanuel Agu, and Elke Rundensteiner. "INTOSIS: Interactive Observation of Smartphone Inferred Symptoms for In-The-Wild Data." *IEEE International Conference on Big Data (Big Data), pp. 4882-4891, 2020*.
- Walter Gerych, Luke Buquicchio, Kavin Chandrasekaran, Abdulaziz Alajaji, **Hamid Mansoor**, Aidan Murphy, Elke Rundensteiner and Emmanuel Agu. "BurstPU: Classification of Weakly Labeled Datasets with Sequential Bias." In *IEEE International Conference on Big Data (Big Data), pp. 147-154, 2020*.
- **Hamid Mansoor** , Walter Gerych, Luke Buquicchio, Abdulaziz Alajaji, Kavin Chandrasekaran, Emmanuel Agu, and Elke Rundensteiner "ARGUS: Interactive Visual Analytics Framework for the Discovery of Disruptions in Bio-Behavioral Rhythms." *EuroVis 2020 - Short Papers. The Eurographics Association, 2020.* **(Best short paper honorable mention award)**

2019

- **Hamid Mansoor**, Walter Gerych, Luke Buquicchio, Kavin Chandrasekaran, Emmanuel Agu and Elke Rundensteiner. "DELFI: Mislabelled Human Context Detection Using Multi-Feature Similarity Linking." *IEEE Visualization in Data Science (VDS) symposium at IEEE VIS, 2019.*
- **Hamid Mansoor**, Walter Gerych, Luke Buquicchio, Kavin Chandrasekaran, Emmanuel Agu and Elke Rundensteiner. "COMEX: Identifying Mislabeled Human Behavioral Context Data Using Visual Analytics." *IEEE 43rd Annual Computer Software and Applications Conference (COMPSAC). Vol. 2. IEEE, 2019.*
- Bonnie Gale, Lauren E. Charles, **Hamid Mansoor** and Chen-Yeou Yu "PocketAID: The Pocket Atlas of Infectious Diseases Mobile Application." *Online Journal of Public Health Informatics 11.1, 2019.*

2018

- **Hamid Mansoor** and Lane Harrison. "Data Visualization Literacy and Visualization Biases: Cases for Merging Parallel Threads." *Cognitive Biases in Visualizations. Springer, Cham 2018*

2017

- **Hamid Mansoor** , Kartik Vasu and Lane Harrison. "Linking Performance on Graphical Perception tasks to Visualization Literacy." *IEEE VIS Poster Proceedings, 2017.*

SERVICE

Web and Publicity Chair, Graphics International (**GI**)	**2023**
Conference Program Committee:	
International Conference on Information Visualization Theory and Applications (**IVAPP**)	**2024**
Case Studies at **ACM CHI**	**2024**
International Symposium on Visual Computing (**ISVC**)	**2021, 2022, 2023**
International Symposium on Visual Information Communication and Interaction (**VINCI**)	**2022, 2023**

AWARDS

WPI Graduate Research Innovation Exchange (GRIE) Symposium Finalist	**2022**
EuroVis Short Paper Honorable Mention Award	**2020**
WPI Graduate Travel Award	**2017, 2019**
The Alireza Family International Scholarship, Tufts University	**2013, 2014**