Hesam Alizadeh

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Summary of Qualifications

Skilled Software Engineer delivering interactive web-based applications with a talent for creating MVPs and delivering high-quality products. Passionate about collaborating with diverse individuals and leveraging the right tools to achieve exceptional results. Strong foundation in artificial intelligence and machine learning algorithms and techniques.

Technical Skills

Languages	C#, TypeScript, JavaScript, Node.js, Python
Databases	Postgres, Microsoft SQL Server, MongoDB
Data/ML	Tensorflow, NumPy, Pandas
Web	Angular, Vue.js, React, RxJS, Node.js, REST

Education

2013 - 2016	M.Sc. **Human Computer Interaction**, University of Calgary, Calgary, Canada
2010 - 2013	M.Sc. **Machine Learning and Robotics**, University of Tehran, Tehran, Iran
2005 - 2010	B.Sc. **Software Engineering**, University of Tehran, Tehran, Iran

Professional Experience

Software Engineer II **August 2021 - Present**
Microsoft, Vancouver, Canada
- Part of the team developing a first-party app for Microsoft Teams enabling users to send/receive payments in meetings and beyond.
- Contributed to improving the reliability and performance of the Teams platform.
- Technologies - .Net Core, Cosmos DB, Azure, React

R&D Software Engineer **April 2018 - June 2021**
Locaintel, Vancouver, Canada
- Lead the development and delivery of the "Industry Advantages" product. Conducted data exploration, and built prototype dashboards in Tableau, Built a **neural network** regression model using TensorFlow to mitigate the missing data issues, and developed the front-end application in Angular Product page
- Executed delivery of the "Business & Investment Assistant" product. Iterative development of the MVP, and the production-ready front-end application in Angular Product page
- Engineered a hierarchical block system for building highly customizable dashboards and providing flexibility for embedding their indicators.
- Re-engineered legacy systems (code migration, data remodeling, etc), boosting maintainability and minimizing manual input for client on-boarding
- Technologies - Tableau, TensorFlow, Angular, Python, .Net Core, Postgres, MongoDB, SQL Server, HTML5/CSS3

Full Stack Developer **June. 2017 - March 2018**
SMART Technologies, Calgary, Canada
- Part of the LAB team, creating single page web-based educational learning activities for K-12 students
- Collaborated with the product owner and UX designers to define/improve product features
- Prepared and presented technical documentation to internal stakeholders
- Technologies - Vue.js, Ember, Node.js, Java, HTML5/CSS3.

Full Stack Developer **Oct. 2016 - June. 2017**
Guavus, Montreal, Canada
- Part of the UI team, involved in development/maintenance of a web-based real-time monitoring system
- Contributed to migrating a large-scale AngularJS system to Angular 2. Incorporating best practices and new patterns/technologies (Typescript, Redux, D3.js) in the process
- Technologies - Angular 2, AngularJS, Spring MVC, Karma, Jasmine, Cucumber, HTML5/CSS3

Research Intern **March. 2016 - Aug. 2016**
SMART Technologies, Calgary, Canada
- Collaborated with the in-house UX and development teams to prototype an interactive classroom attendance

taking tool
- Interviewed several K-12 teachers to better understand their attendance taking/warm-up routines
- Implemented a proof of concept add-on for the SMART Notebook software
- Technologies - Express.js, Javascript, HTML5/CSS3

UX Research Assistant **Sept. 2013 - Aug. 2016**
University of Calgary, Calgary, Canada

- Iterative design and prototyping of a remote exercise system for seniors. Used Kinect and Vicon cameras for tracking user's body. Developed a Node.js server for transferring the data between the remote servers
- Used several HCI methodologies including User-Centered Design, Observational Experiment, Usability Evaluation, Cultural Probes, and Interviewing
- Technologies - WPF.NET, Node.js

Research Assistant **Sept. 2010 - Aug. 2013**
University of Tehran, Tehran, Iran

- Researched and developed a learning algorithm for a simulated air hockey playing robot in Matlab and C++ enabling the robot to learn performing accurate shots by performing few sample shots
- Designed and built a real-time air hockey playing robot in collaboration with a mechanical engineer using image processing techniques for tracking the puck movement
- Technologies - C++, OpenCV, Matlab

Teaching Experience

Teaching Assistant **Sept. 2013 - Aug. 2016**
University of Calgary, Calgary, Canada

- **Human Computer Interaction**: Taught basics of HCI methodologies and WPF programming in Visual Studio, reviewed student projects and provided feedback throughout the design process
- **Introduction to Computer Science I & II**: Taught programming concepts including Object Oriented programming in Java and Python to the students, marked course assignments and exams, and provided students with step-by-step feedback throughout the design process

Teaching Assistant **Fall. 2008 - Winter 2012**
University of Tehran, Tehran, Iran

- **Social Network Analysis**: Designed and graded assignments, taught social network analysis concepts and tools including Gephi
- **Artificial Intelligence**: Taught artificial intelligence concepts, held problem solving classes, and supervised student projects submitted in Java
- **Introduction to Computer Science**: Taught programming concepts in C++ to the students and marked course assignments and exams

Publications

GI 2016	**Alizadeh, H.**, Witcraft, A., Tang, A., and Sharlin, E. "HappyFeet: Embodiments for Joint Remote Dancing." In Graphics Interface 2016.
CHI 2014	**Alizadeh, H.**, Tang, R., Sharlin, E., and Tang, A. "Haptics in remote collaborative exercise systems for seniors." In CHI 2014.
CHI 2014	Tang, R., **Alizadeh, H.**, Tang, A., Bateman, S., and Jorge, J. A. "Physio@Home: Design explorations to support movement guidance." In CHI 2014.
ICRoM 2013	**Alizadeh, H.**, Moradi, H., Ahmadabadi, M.N. "Automatic calibration of an air hockey robot." In Robotics and Mechatronics (ICRoM) 2013.

Volunteer Activities

VP Calgary Persian Library **2015**
University of Calgary, Calgary, Canada

- Organized several cultural events including charity events, book clubs, and poetry reading clubs
- Developed a library management system using Google Apps Script

Student Volunteer **May 2014**
ACM CHI Conference 2014, Toronto, Canada

- Coordinated conference sessions and similar duites