

Elahe Paikari

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Irvine, California, USA

Qualifications

- Over 5 years of experience in analysis, design and implementation of software applications.
- Strong background in data structures, algorithms and object-oriented programming.
- Goal-oriented and team player.
- Strong leadership, planning, multi-tasking and presentation skills.
- Communicated and collaborated with industry partners during research and development projects.
- Over 2 years of experience in teaching various courses.

Education

Ph.D. in Software Engineering September 2017 - Present
University of California, Irvine, USA – Dept. of Informatics

M.S. in Software Engineering August 2012 - August 2014
University of Calgary, AB, Canada – Dept. of Electrical and Computer Engineering

B.S. in Software Engineering August 2008 - July 2012
Azad University, Tehran, Iran – Dept. of Computer Engineering

Software Research and Development Experience

Research Assistant – University of California, Irvine September 2017 – Present

- Designing and implementing a bug report chatbot to help users turn a bad bug report to a good one.
- Designing and developing a code conflict avoidance chatbot for early detection of potential development conflicts arising from concurrent code changes.
- Developing a comparison framework to examine current state of software chatbots and their directions for future work.
- Designing and developing a voice-based interface to an electronic whiteboard sketching tool.

Software Developer – Intelliview Technologies Inc. February 2015 – August 2017

- Designed, developed and unit tested core Intelliview software components and features (video analytics solutions for industrial surveillance applications) as a service.
- Designed, implemented and tested web application/UI.
- Worked with QA staff and other stakeholders to resolve bugs and implement feature requests.
- Participated in and led code reviews, development processes and standards.
- Conducted research on emerging technologies and implemented prototypes and proof of concepts.

Software Developer – Shell, City of Calgary and University of Calgary September 2014 – January 2015

- Analyzed Calgary road info databases in Microsoft SQL Server and developed ETL processes, using Pentaho, to form a data mart.
- Analyzed and designed data models via statistical and mining methods, using Weka.
- Designed an online/offline safety feedback system, applying multi-agent methods and UML, using Aimsun traffic network simulator.
- Developed a video driven traffic system, applying image-processing techniques.

Research Assistant – University of Calgary

February 2013 – August 2014

- Integrated PARAMICS traffic simulator with OPNET wireless network simulator using open source applications to evaluate Connected Vehicle (CV) communication ranges in Wi-Fi and WLAN protocols.
- Developed ETL processes to extract output CSV files from PARAMICS, transformed the data into the XML format, for the use of OPNET.

Software Developer – Encom Wireless Data Solutions Inc. and University of Calgary

August 2012 – February 2013

- Designed and analyzed a Connected Vehicle (CV) system as a multi agent system.
- Implemented APIs to develop a system model to support simulation of CV systems, leading to the simulator being able to compete with commercial simulators.
- Addressed client’s requests and provided optimum outputs, resulted in willingness of the University to invest in similar projects.
- Validated the developed CV system by reducing accidents and travel time index in Deerfoot trail, Calgary, Alberta; recommendations and assessment results are currently being used by the client to implement CV systems in Calgary and having the potential to be applied in other cities of Canada.

Skills and Proficiencies

Programming Languages	Software Tools
C/C++, C++11, MFC, Boost, Java, C#, QT, HTML, CSS, JavaScript, Node.js, ES6, React, Angular.js, Angular 2, Bootstrap, Web Sockets, RESTful API, XML, SQL, PhP, Python	Microsoft Visual Studio 2005/2010/2012/2013, Eclipse, Weka, Pentaho, MS Visio, VMWare, OPNET, PARAMICS, Aimsun, MATLAB, Subversion, Rational Rose
Database Management System	Algorithms
Microsoft SQL Server, MySQL, Oracle, PostgreSQL	Data Mining, Machine Learning
Development Processes	Web Platforms
Agile, Rational Unified Process, Waterfall	Apache Tomcat

Publications

- Elahe Paikari, Jaeun Choi, Seonkyu Kim, Sooyoung Baek, Myeongsoo Kim, Seungeon Lee, Chaeyeon Han, Youngjae Kim, Kahye Ahn, Chan Cheong and André van der Hoek, “A Chatbot for Conflict Detection and Resolution”, In 1st International Workshop on Bots in Software Engineering (BotSE’19), 2019, pp. 1-4.
- Elahe Paikari and André van der Hoek, “A Framework for Understanding Chatbots and their Future”, In Proceedings of 11th International Workshop on Cooperative and Human Aspects of Software Engineering (CHASE’18), 2018, pp. 1-4.
- E. Paikari, M. Moshirpour, R. Alhaji, and B. H. Far, "Data Integration and Clustering for Real Time Crash Prediction", 15th IEEE International Conference on Information Reuse and Integration (IRI), 2014, pp. 1-8.
- E. Paikari and B. H. Far, "Analysis, Design and Implementation of an Agent Based System for Simulating Connected Vehicles", 26th International Conference on Software Engineering and Knowledge Engineering (SEKE), 2014, pp. 1-6.
- E. Paikari, S. Tahmasseby, and B. H. Far, "A Simulation-based Benefit Analysis of Deploying Connected Vehicles Using Dedicated Short-Range Communication", IEEE Intelligent Transportation Systems Society on Intelligent Vehicles (IV) Symposium, 2014, pp. 1-6.
- E. Paikari, L. Kattan, S. Tahmasseby, and B. H. Far, "Modelling and simulation of advisory speed and re-routing strategies in connected vehicles systems for crash risk and travel time reduction", 26th Annual IEEE Canadian Conference on Electrical and Computer Engineering (CCECE), 2013, pp. 1-4.

Grant

May 2016 – April 2018

Alberta Innovates (AITF) – Industry Research and Development Associate program for amount of 110k for 2 years.

Volunteer

University of Calgary

January 2013 - December 2013

Center of International Students and Study Abroad