

Leverage 5 Years of Software Engineering Background to Develop Robust Applications.

## EDUCATION

### **M.S. Computer Engineering - Purdue University, Indianapolis**

Anticipated Graduation: **Dec 2018**

*Relevant Courses:* Advanced Algorithms, Database Management, Programming for AI

### **B.S. Information Technology - University of Tabriz, Iran**

Graduated: **June 2016**

*Relevant Courses:* OOP Programming, Data Structures, Database Management

## PROFESSIONAL EXPERIENCES

### **R&D Software Engineer Intern - CourseNetworking (thecn.com) - Indianapolis IN**

Jan 2017 - Present

- Developed and integrated Rumi Intelligent Agent in the CN to recommend jobs, recommend friends, and help the learners and the educators to excel in their academic life.
- Managed a team of developers and interns to implement IMS Global Common Cartridge standard in the CN. Designed and developed automated and unit tests, created the design documents, and led the development process.
- Performed design documents to improve the CN's capabilities to support IMS Global Question & Test Interoperability standard.

### **Graduate Research Assistant - CyberLab (cyberlab.iupui.edu) - Indianapolis IN**

Dec 2016 - Present

- Proposed modified Recurrent Neural Networks and Feed Forward Neural Networks models to predict the water consumption in central Indiana to Citizens Energy Group.
- Launched a commercial and applied science research project Rumi Intelligent Agent as a personal assistant in educational area, which learns about the students and the instructors by using machine learning techniques.

### **Software Engineer Intern - Rasaneh System - Tabriz, Iran**

Sep 2015 - Apr 2016

- Developed modules and plugins for Joomla and Wordpress, and achieved hands-on training on PHP, MySQL, HTML, CSS, and JS.

### **Research Intern - Health Informatics - Saeb Clinic - Tabriz, Iran**

Dec 2014 - May 2015

- Analyzed patients' clinical notes and applied NLP algorithms to extract medication information.
- Developed a scrapping tool to export large amount (over 4 millions) of patient-generated data from 5 popular breast cancer forums to discover hidden aspect of patients' day-to-day life

## PROJECTS

### **Intelligent Agent** *Relevant Technologies: PHP, MongoDB, jQuery, Restful APIs, Machine Learning*

June 2017

- Proposing and developing Rumi Intelligent Agent to discover the learners' and the instructors' needs and answer them in a way that has positive effects on their learning environment and academic life
- By using machine learning, Rumi will analyze complex data to recommend jobs, friends and resources for the students to help them to progress in their courses.
- It will help the instructors to find useful course materials, monitor the students' progress in the courses, and connect with others.

### **Common Cartridge 1.3 Implementation** *Relevant Technologies: PHP, JS, HTML, XML, Json*

March 2017 - Aug 2017

- Created design documents and implemented IMS Global Common Cartridge in the CN
- The extension will allow the instructors to package and exchange digital learning materials and assessments of their desired course contents with any other IMS Global CC certified learning management systems

### **Distributed Data Extraction & Analysis** *Relevant Technologies: PHP, Mallet, NLP, Text Mining*

Jan 2015 - May 2015

- Developed a web-based application to extract vast number of users' posts
- Employed topic modeling NLP techniques and compared the themes and patterns among dominant topics to discover the breast cancer patients' hidden challenges and the needs that might not be addressed by healthcare providers

## PUBLICATIONS

- **Novel Approach to Cluster Patient Generated Data into Actionable Topics**  
*Josette Jones, Masoud Hosseini, Anand Kulanthaivel, Meeta Pradhan, Mahmood Hosseini*
- **A water demand prediction model for Central Indiana**  
*Setu Shah, Mahmood Hosseini, Zina Ben Miled*
- **Hidden Aspects of Breast Cancer Patients' life: An NLP Approach**  
*Masoud Hosseini, Mahmood Hosseini, Josette Jones*

JMIR Publications - Accepted

IAAI - Feb 2018

IndyBigData - May 2015

## AWARDS

- **Jafari Exceptional Graduate Research Assistant Scholarship** - Purdue University, Indianapolis
- **Best Poster Award** "Hidden Aspects of Breast Cancer Patients' life: An NLP Approach" - IndyBigData

Dec 2016

May 2015

## SKILLS

**Languages & Frameworks:** C | C++ | Python | Java | PHP | JS | MPI | HTML | CSS | Laravel | Yii | jQuery | Bootstrap | ReactJS | NightwatchJS

**Technologies & Platforms:** Agile and DevOps | MVC | Jira | PHPUnit | AJAX | RESTful APIs | Docker | Parallel Computing | Composer | GitHub

**Data Mining Apps:** Matlab | Weka | Mallet

**DBMS:** Microsoft SQL Server | MySQL | MongoDB | SQLite

**Lingual Skills:** English | Persian | Azeri

\* References are available