Nima Mousavi

+1 (858) 291-2083mousavi@ucsd.edu http://nmmsv.com UC San Diego 9500 Gilman Drive La Jolla, CA, 92093-MC 0639

SUMMARY

Looking for a research or software engineering internship position.

EDUCATION

University of California, San Diego, La Jolla, CA 2015-2020 (Expected) PhD, Electrical and Computer Engineering GPA: 3.85

Research focus: Bioinformatics and Population Genetics

Sharif University of Technology, Tehran, Iran 2011-2015 BSc, Electrical Engineering GPA: 3.94

SKILLS

- Strong background in computer programming and object oriented C++ and Python.
- Deep mathematical and probabilistic knowledge and experienced in theoretical problem analysis.
- Profound knowledge of algorithms and data structures and demonstrated proficiency in problem solving by deriving creative and innovative solutions.
- Excellent teamwork and leadership skills, shown as constructive cooperation with colleagues.

PUBLICATIONS

Accuracy-Resource Tradeoff for Edge Devices in Internet of Things, N. Mousavi, B. Aksanli, A. Akyurek, T. Rosing, IEEE Smart Edge 2017

EXPERIENCE

Genotyping STR Expansions, UC San Diego, La Jolla, CA Feb 2017 - Ongoing

- Development of software tool for accurately genotyping short tandem repeats from aligned short read sequencing data.
- Created a maximum likelihood model based on local realignment of paired-end reads.
- Implemented using object oriented C++ after prototyping with Python.
- Validated using simulated data, and currently testing on whole genome and whole exome datasets.

Context Engine, UC San Diego, La Jolla, CA

May 2016 - Nov 2016

- Developed the object oriented design of a modular middleware for IoT.
- Supervised development of machine learning code and system integration.
- Implemented embedded system interface with local sensors and actuators and cloud-based database.
- Showcased the capability of system using an end-to-end application alongside poster presentation.

Teaching Assistant

Sep 2014 - Mar 2017

Components and Design Techniques for Digital Systems UC San Diego Computer Structures and μ Processors Lab (Lead Assistant) Sharif Univ. of Tech. Principles of Electrical Engineering Sharif Univ. of Tech.

- Clarified lecture material for students by holding well-received discussion sessions.
- Communicated with students and provided mentoring and advising.

Volunteer Work, Iranian Student Association, UC San Diego May 2016 - Present

- Vice President (May 2017-Present), Financial Director (May 2016-May 2017)
- Collaborated with university officials, other board members, and volunteers in holding events with upwards to 300 attendance from the community.

RELEVANT COURSEWORK

- Algorithm Design
- Object Oriented Programming
- Population Genetics

- Machine Learning
- Princip. of AI: Prob. Reasoning
- Statistical Learning