Qi Liu

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EDUCATION

UNIVERSITY OF COLORADO BOULDER
PhD Candidate in Electrical Engineering
Expected. May 2018 | Colorado, USA

MS in Electrical Engineering
Grad. Dec 2014 | Colorado, USA
Cum. GPA: 3.86 / 4.0

HARBIN INSTITUTE OF TECHNOLOGY
BS in Electrical Engineering
Grad. Jul 2010 | Harbin, China

SOFTWARE SKILLS

Proficient in:
Python • Matlab • Git • Eclipse
Familiar with:
JavaScript • Keras • LaTex • C • MySQL
Have prior experience with:
R • Java • NoSQL • HTML • CSS • Android • PyTorch • TensorFlow

COURSE

Statistical Modeling
Big Data Analytics
Intro to Time Series
Space Hardware Design
Modern Signal Processing
Intelligent Systems Design
Natural Lang Processing
Complex/Dynamical System
SW Engr Distributed System
Search Eng & Anal Hi-dim Dataset

LEADERSHIP

Principal Investigator of Mirabot
EEF Project (CU Boulder)
TEDx - Artificial Autism Talk
Chief Architect for Robauto
Co-founder, Lead Firmware Engineer of Stryd
Lead Electrical Engineer of NASA X-Hab Challenge (CU Boulder)

EXPERIENCE

DATA SCIENTIST - INTERN | Concord New Energy
May 2017 – August 2017 | Beijing, China

- Responsible for the health monitoring and fault diagnosis machine learning engine development for solar farms
- Led the algorithm team, developed unsupervised fault detection and classification algorithms
- Successfully deployed the algorithms in a 40MW solar farm

SOFTWARE ENGINEER - INTERN | Pearson
June 2015 – June 2016 | Centennial, CO, USA

- Worked on the Project Management team, led and developed a new resource management software (SWAN) to replace Google Fusion Table
- Conducted requirements gathering through interviews with stakeholders
- Led front and back end software development using MongoDB, Java
- Presented the work to VP, program managers and successfully deployed the application within 10 weeks

RESEARCH & DEVELOPMENT ENGINEER | Stryd - Startup
May 2013 – May 2015 | Boulder, CO, USA

- Analyzed human walking/running data, designed gait analysis algorithm
- Designed, implemented, and maintained complete embedded software for wearable devices in start-up environment, from initial prototype to market

GRADUATE RESEARCHER | CU Boulder
Sep 2012 – Present | Boulder, CO, USA
Project: Human Behavior and Urban Dynamics Analysis

- Conducted a large-scale spatial-temporal analysis of over 14 millions data records from an online food delivery company
- Proposed novel clustering methods to infer users' dining locations

Project: Anomaly Detection and Quality Assurance of Massive Satellite Data

- Proposed an unsupervised contextual anomaly detection method
- Enabled automated novel knowledge discovery from massive satellite images

Project: Energy-Efficient Wearable Analysis for Running

- Proposed and implemented an adaptive sparse sensing algorithm to reduce system power consumption

EMBEDDED SYSTEM TEACHING ASSISTANT | CU Boulder
2012, 2014, 2017 | Boulder, CO, USA

- Instructed undergraduate courses on embedded software design, debugging, and implementation using ARM microprocessors, FPGAs, Android

AWARDS

2017 Graduate Research Award Nomination
2017 Electrical Engineering Travel Fellowship
2017 Graduate Travel Award
2016 Engineering Excellence Fund
2012 Electrical Engineering Merit Fellowship
2012 Dean's Fellowship Award