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Chenyu HUANG

• Address: 337 NE Thornton Place 350, Seattle, WA, 98125

Work Experience

Software Engineer, Whitepages, Inc, Seattle, WA

Apr. 2018 - Present

- Full stack development in Ruby on Rails and Python Flask
- Cross platform mobile development in *React Native*
- Experience with *Kubernetes*, *Helm* and *Jenkins* deployment automation
- Follow *SDLC* and work under a *SOC2* compliant protocol

Software Engineering Intern, Mitek System, Inc, San Diego, CA

Jun. 2017 - Mar. 2018

- Developed and shipped MobileDocs SDK for high resolution document capture for *Android* devices
- Worked in an Agile and Test Driven environment developing Android SDKs in Java
- Automated *unit tests* using *JUnit* and *Robolectric*, continuous build and integration with *Jenkins*

Teaching Assistant, UCSD, San Diego, CA

Fall. 2017

• TAed for undergraduate course Computer Networks

Research Assistant, SeeLab UCSD, San Diego, CA

Jun. 2017 - Sep. 2017

- Worked with PhD candidates developing high performance, low power *classifiers* in *Matlab*
- Achieved the same accuracy as conventional *Neural Network* with significant saving in energy
- Results published on *Design Automation Conference* 2018 as second author

Software Engineering Intern, Rolls-Royce, Singapore, SG

Jan. 2015 - May. 2015

- Worked with PhD researchers developing data-driven web application in D3.js
- Automating data cleaning and extraction with *Python*

Education

Master of Science in Computer Science, San Diego, CA

Sep. 2016 - Mar. 2018

University of California, San Diego (UCSD), GPA: 3.69/4.0

Bachelor of Engineering in Electrical Engineering, Singapore

Aug. 2012 - Jun. 2016

Nanyang Technological University (NTU), GPA: 4.62/5.0, 1st class honors

Publication

Design Automation Conference, San Francisco, CA

June. 2018

"M. Imani, C. Huang, D. Kong, T. Rosing Hierarchical Hyperdimensional Computing for Energy Efficient Classification, IEEE/ACM Design Automation Conference (DAC), 2018."

Academic Projects

Column-based Scalable Database

May - Jun 2017

- Designed and implemented an NoSQL column-based database system in Java
- Implemented the database with *Memtable* to store recent data and *SSTable* to store *long-tail* data
- Implemented a Bloom Filter to efficiently determine membership status of any data entry

Web Mining and Recommender Systems

Jan. 2017 - Mar. 2017

- Applied the techniques of *Regression, Classification* to build a rating predictor system in *Python*
- Implemented a Latent Factor Model in Python to predict user ratings of their Amazon purchases
- Achieved an mean square error of 12.6 for rating prediction on a scale of 100

Computer Vision

Sep. 2016 - Dec. 2016

- Implemented image formation of *perspective camera model* with different camera parameters
- Implemented a face recognition algorithm based on Eigenfaces and Principle Component Analysis.
- Implemented the *Lucas-Kanade algorithm* to estimate optical flow between image frames in *Matlab*

Probabilistic Learning

Sep. 2016 - Nov. 2016

- Implemented a set of learning algorithms in Java and Matlab, including maximum likelihood, EM
- Implemented multiple Markov language models, e.g unigram, bigram and mixture models in Java
- Implemented a Markov decision model for a puzzle solving agent using value and policy iteration

Computer Skills

Java, React-Native, Reactis, Ruby on Rails, Flask, Kubernetes, Helm, Latex