## LIXUE ZHANG

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**OBJECTIVE** Seeking a fulltime software development position.

## **EDUCATION AND WORKING**

MS candidate of Computer Science, University of California Santa Cruz, **09/2016-03/2018** Software Engineer, Ericsson Communication Co. LTD, 12/2015-06/2016 Wireless Network Researcher, HUAWEI TECHNOLOGIES, 04/2011-10/2015 M.S. in Signal and Information Processing, Harbin Engineering University, China, 09/2008-03/2011 B.S. in Electronic Engineering, Harbin Engineering University, China, 08/2004-07/2008

## **Major Courses and GPA**

Analysis of Algorithms, Programming Languages, Computer Architecture, and Data Mining. GPA: 3.63

## **PROJECTS**

- (1) Design and build the Website "scenicspots.herokuapp.com", in UC Santa Cruz, 01/2017 04/2017
  - Implement a website named "Scenic Spots" to present some beautiful places with plentiful information.
  - A register could publish images, words description, score and location displayed with google map; Reviewers could browse and leave/update/delete some comments towards any spot.
  - Front end was implemented by HTML/CSS/Bootstrap with JavaScript for google map.
  - Back end was based on Node JS express framework together with MongoDB and Mongoose.
  - Passport and Google Map API were also introduced as authentication and site location services.
  - With the support of Heroku and mLab, the website "Scenic Spots" was published.
- (2) Research and Development of a human and computer dialog system named "Slug Movie-Bot", **programming language:** python, in UC Santa Cruz, 03/2017—07/2017
  - Improved Movie Bot, an experimental skill available on Amazon Alexa which answers straightforward questions about movies by iMDB database.
  - Our project finally provided a personality and opinions to Alexa, extracted from our own Twitter corpus of movie opinions together with iMDB.
  - By introducing Stanford Core-NLP into our platform, the Slug MovieBot could identify sentiment of a piece of tweet correctly and form some interesting responses to continue the conversation.
  - By developing Slug MovieBot, we contributed towards the work by SlugBot UCSC's team in the Alexa Prize Contest.
- (3) Predicting Potential Shoe Purchasers Using Machine Learning, **programming language**: R, in UC Santa Cruz, 11/2016–12/2016
  - A shoe company would like to predict who is the potential buyer of their products through some statistic data.
  - With the knowledge of data mining, we did a lot of comparisons among supervised, unsupervised and semi-supervised learning methods.
  - By implementing K Nearest Neighbor(KNN), Support Vector Machine(SVM) and Decision Tree algorithms, we designed a predictor which could achieved a prediction with an error less than 1.0%.
- (4) Redo project "uplink noise and interference detection", programming language: C, in Ericsson, 2016
  - One LTE baseband feature, aiming at detecting and reporting noise and interference in UL-PRBs.
  - Responsible for the physical layer, finished noise detection and reporting to the LTE MAC layer.
  - Migrating traditional method to the GP Blocks to broad the range of noise detection.
- (5) User Plane Splitting Project, programming language: C, in Ericsson, 2016
  - Merged Fast track edition (developed by our team during the past two years) to the changed Main Track edition (developed by the team in Sweden).
  - Responsible for the downlink physical layer programs. Solved the Merging collisions and modified the codes to cope with some failed test cases after merging.