

# Linda (Hanzhang) Zheng

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## EDUCATION

### RICE UNIVERSITY

BS IN COMPUTER SCIENCE,

STATISTICS

Graduated May 2016 | Houston, TX

GPA: 3.7

## COURSEWORK

### COMPUTER SCIENCE

Artificial Intelligence

Adv. Computer Game Creation & Design

Operating Systems

Concurrent Programming

Database Systems and Design

Object Oriented Programming

Compilers

Adv. Algorithms

### STATISTICS

Data Mining & Statistical Learning

Financial Time Series

Regression Analysis

Bioinformatics

## SKILLS

### PROGRAMMING

Java • Python • JavaScript/Typescript • R

• Matlab • HTML/CSS • C • C++ • Kotlin

• Swift

### FRAMEWORKS

Spring • Angular • React • AWS • Android

• iOS

## EXPERIENCE

### CAPITAL ONE | SOFTWARE ENGINEER

July 2016 – Present | Plano, TX

- Promotion from Associate to Senior Associate after 1 year.
- Developed a standalone Angular Widget that was easily integrated with all Financial Services applications to capture customer feedback throughout the loan application process. Backend API developed in Java, deployed using AWS with PostgreSQL database, with Splunk dashboard for Business Analysts.
- Built developer platform for Business Analysts and Data Scientists as a "playground" to explore all Marketing data collected by Capital One, using Open Source Zeppelin Project, and adding additional features such as connection to Redshift Cluster, Schema Browser powered by ElasticSearch, SQL Parser/Linter and Visualizer.
- Designed and implemented Automated Handwriting System. Built UI in Angular 2 that allowed Agents to enter text, send text to API (Python Flask) for processing and handwriting generation using template fonts and Recursive Neural Network Machine Learning algorithms trained on crowdsourced handwriting database. Wrote client software for Robot Arm (AxiDraw V3) to poll Server for new jobs to "write" and sends back job status information. UI includes dashboard of job information and previously completed jobs.
- Developed enterprise-wide API as an abstraction for Cloud file storage and retrieval (currently S3). Built as part of a larger initiative to resolve storage space issues in the on-premise Data Center.
- Designed and implemented automated data migration system with weekly queries to extract files from on-premise Data Center and move them to the Cloud with unique IDs for fast retrieval.

### SHAPE SECURITY | KPCB FELLOW + SOFTWARE ENGINEERING INTERN

May 2015 – Aug 2015 | Mountain View, CA

- 60 out of 2500+ applicants chosen to be a Kleiner, Perkins, Caufield and Byers Engineering Fellow of 2015. Assigned to portfolio company, Shape Security, a leading Cyber Security Startup.
- Upgraded Shift, Shape's open source project, to support tooling for ECMAScript 2015. Tools include: Abstract Syntax Tree node generator, Parser, Code Generator from AST, AST Validator, Fuzzer, Reducer, (De)Serializer.
- Speaker at South Bay JavaScript MeetUp.

### PROS | SOFTWARE ENGINEERING INTERN

May 2014 – Aug 2014 | Houston, TX

- Built tool to parse log files of important business systems and interactively display data using ELK stack.
- Built nightly email task to summarize flight booking statistics, using map-reduce algorithms.
- Created Notification Service and Notes Service for Travel Agent System.
- Built validation utility to validate input data from users.

### JONES MCCLURE PUBLISHING | SOFTWARE ENGINEERING INTERN

June 2013 – Sep 2013 | Houston, TX

- Built two dynamic web applications and mobile-compatible versions (Income Tax Calculator and Child Support Calculator).
- Built Administration site to track and display internal business data.
- Wrote plug-in for FogBugs that allows non-IT employees to report bugs within the software to the Engineering Team.

## OTHER PROJECTS

### **SIMPLE WAR | PERSONAL PROJECT**

2018 | Anywhere

REST-ful, turn-based game with online match-making. Front-end built in Angular 4, with Java as the API and game-engine layer, MongoDB for game data storage, and websockets for real-time board updates. Players take turns placing cards (troops, walls, special) on the board. Player wins when a certain number of points have been scored. Points are earned from successfully moving troops across the board to the opponent's side, while the opponent places cards to stop advancement.

### **DECODING THE BRAIN FROM ELECTROCORTICOGRAPHICAL READINGS | UNDERGRADUATE SENIOR THESIS IN STATISTICS**

Jan 2016 – May 2016 | Houston, TX

Analyzed ECoG data of brain frequencies obtained from 42 nodes placed on the brain of an epileptic patient while the patient watched videos of a person saying "rock" or "rain" with blurry or clear visual and audio. Goal was to be able to classify the type of stimuli based on the brain frequencies data. Used 3D and 4D Higher Order Partial Least Squares Methods for analysis. Found strong effects of priming in the brain (audio section of the brain became activated when visual start even if there is no audio yet, and vice-versa).

### **RECOMMENDATION SYSTEM COMPETITION | TERM PROJECT**

Sep 2015 – Dec 2015 | Houston, TX

Class competition to build a system with the best recommendations for online dating profiles based on users' past ratings, using various statistical learning algorithms.

### **PAC-MITE COMPETITION | TERM PROJECT**

Sep 2015 – Dec 2015 | Houston, TX

Class competition to find the best gene for a PAC-Mite species, using various AI and search algorithms that we learned throughout the semester.

### **CHIMEHACK 2 | HACKATHON PARTICIPANT + HONORABLE MENTION**

July 2015 | San Francisco, CA

Built an Android app that detects certain signals/gestures and sends a customized distress message to selected contacts.

### **COMPUTER GAME CREATION | TERM PROJECT**

Jan 2015 – May 2015 | Houston, TX

Multi-player, cross-platform game, combining the game-play mechanics of Doodle Jump, and competitive nature of Mario Kart.