Linda (Hanzhang) Zheng

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EDUCATION

RICE UNIVERSITY
Bachelor of Science in Computer Science, Statistics
Aug 2012 - May 2016
GPA: 3.7

COURSEWORK

COMPUTER SCIENCE
• Artificial Intelligence
• Game Creation & Design
• Operating Systems
• Concurrent Programming
• Database Systems and Design
• Object Oriented Programming
• Compilers
• Data Structures
• Advanced Algorithms

STATISTICS
• Data Mining
• Statistical Learning
• Financial Time Series
• Regression Analysis
• Bioinformatics

SKILLS

PROGRAMMING
• Java
• Python
• JavaScript/Typescript
• HTML/CSS
• SQL
• R
• Matlab
• C
• C++

FRAMEWORKS
• Spring/SpringBoot
• Angular
• React
• AWS
• Android
• iOS

GITHUB
• https://github.com/yaylinda

EXPERIENCE

CAPITAL ONE | Software Engineer (Team: DataDragons)
July 2018 - Present | Plano, TX
• Developed a First Party Ad Server that works with Google AdSense to serve dynamically rendered, individually customized vehicle ads based on information from Capital One cookie values. Ad Server also parses data from the source website, such as vehicle make and model, body type, to serve ads with matching vehicles within the user's area. API responds within 50ms per call. (Java, ECS, Redis, HTML/CSS, Mustache)
• Maintains Webflux API that retrieves over 250+ customer attributes for a given Capital One cookie value or Capital One customer ID. API responds in 5ms per call. This API is central to the whole team's projects. (Java, ECS, Redis, Spring Webflux)
• Designed and developing enterprise-wide platform for automated, real-time, always-on, intelligent marketing campaigns. Comprised of 10+ microservices, including database design and UI/UX development. I am the primary developer and owner of four of the 10+ microservices, one of the three databases, and also a frontend developer for one of the components. (Java, MemSQL, PostgreSQL, Javascript, WebComponents, AWS)
• Instrumented application metrics for the entire team, over 10 microservices, using the Prometheus framework. Authored rules for PagerDuty alerts based on metrics, with Slack integration. (Prometheus, PromQL, Slack)

CAPITAL ONE | Software Engineer (Team: Innovaniacs)
July 2017 - July 2018 | Plano, TX
• Implemented API and UI for Call Center agents to capture notes from customer communications. (Java, Angular, AWS, PostgreSQL)
• Designed and implemented Automated Handwriting System using RNN Machine Learning Algorithms, with UI, server, and polling client to write greeting cards to customers. (Python, Tensorflow, Angular, AxiDraw V3)
• Developed enterprise-wide API for Cloud file storage abstraction. (Java, AWS, S3, SQL)
• Designed and developed an automated data migration system with weekly queries to extract files from the on-premise Data Center and transfer to the Cloud with unique IDs for fast retrieval. (Java, ECS, S3, SQS, CFT, SQL)

CAPITAL ONE | Associate Software Engineer (Team: Myself and DataDragons)
July 2016 - July 2017 | Plano, TX
• Developed Angular Widget that was easily integrated with all Financial Services applications to capture customer feedback. (Java, Angular, AWS, PostgreSQL, Splunk)
• Built ad-hoc data analysis platform using open-source Apache Zeppelin. Implemented features: connection to Redshift Clusters, schema browser, SQL parser/linter/visualizer. (Java, Angular, AWS, Redshift, ElasticSearch, Spark, R, Python)

INTERNSHIPS

SHAPE SECURITY | KPCB Fellow + Software Engineering Intern
May 2015 - Aug 2015 | Mountain View, CA

One of 60 out of 2500+ applicants chosen to be a Kleiner, Perkins, Caufield and Byers Engineering Fellow of 2015. Interned at Shape Security, one of KPCB's portfolio companies. There, I upgraded Shape Security's open-source project, to support tooling for ECMAScript 6, which was just coming out at the time. Tools include: Abstract Syntax Tree node generator, Parser, Code Generator from AST, AST Validator, Fuzzer, Reducer, (De)Serializer. So I could write Java to generate JavaScript code! At the end of the summer, I presented my experience at the South Bay JavaScript Meetup, hosted by Shape Security.

PROS | Software Engineering Intern
May 2014 - Aug 2014 | Houston, TX
Worked on three distinct projects during my internship: Project #1 - Implemented ElasticSearch, LogStash, Kibana stack for various application logs. (ELK) Project #2 - Built nightly task that summarizes flight booking statistics and sends analytics email, using map-reduce algorithms. (Java, Cassandra) Project #3 - Created APIs for Notification and Notes Services for a Travel Agent System. (Java)

JONES MCCLURE PUBLISHING | Software Engineering Intern
June 2013 - Sep 2013 | Houston, TX
Built two dynamic web applications and mobile-compatible versions: Income Tax Calculator, Child Support Calculator. (C#, Javascript/HTML/CSS). Also built an Administration site to track and display internal business data. (C#, Javascript/HTML/CSS).

OTHER PROJECTS

SIMPLE WAR | Personal Project
2018-Present | 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 game-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. Give it a try (looks better in half-screen).

PARKING NAVIGATOR | Company Hackathon
Aug 2017 | Plano, TX
Project for internal Hackathon hosted by Capital One. Drone flies around campus on a pre-set path, taking aerial shots of parking lot. Sends pictures to server for processing, using edge detection to find empty parking spots.

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).

COMPUTER GAME CREATION | Senior 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. The game is called "Poporopo" (looks better in half-screen).