Wenlin Huang

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New Graduate Available for **Software Engineer Full-Time** Opportunities

Education

- **Northeastern University** — Seattle, WA
  Master of Science in Computer Science — *Sept. 2016 – Dec. 2019*
  - **Key Courses:** Scalable Distributed Systems, MEAN Stack Web Development, Algorithms, Object-Oriented Design

Experience

- **OfferUp, Inc - Autos Team** — Bellevue, WA
  Software Development Engineer Intern - Backend — *May. 2019 – Aug. 2019*
  - Migrated promotion package tracking system from spreadsheet to Django Admin, backed by RESTful APIs and DynamoDB
  - Designed and implemented versioning for promotion package audit history with DynamoDB Transactions API
  - Updated Terraform and Snowflake scripts to ensure the new DynamoDB table works with the existing data pipeline
  - Reduced the runtime of the airflow job generating autos dealers' promotion package items by 90% with multithreading
  - Backfilled autos dealers' promotion package data to DynamoDB production table, and handed the tool over to the auto sales team that significantly increased their productivity
- **Red Hat OpenShift - OperatorHub.io** — Boston, MA
  Software Development Engineer Intern — *Jan. 2019 – May. 2019*
  - Built, packaged and verified required artifacts that allow Dynatrace OneAgent Operator to be easily deployed through OpenShift marketplace operator in OpenShift/Kubernetes cluster, and application pods to be created in target namespaces
  - Worked as a major contributor and maintainer of the operator-courier (https://git.io/fjzjC) project and added multiple features with unit/integration tests written
  - Set up continuous integration with Travis CI, so that builds are triggered on different events (pull requests, cron jobs, etc.)
  - Actively engaged with the open source community on GitHub in multiple projects by creating pull requests, doing code reviews, and submitting issues
- **Amazon Web Services - AWS CodeBuild** — Seattle, WA
  Software Development Engineer Intern — *Feb. 2018 – Apr. 2018*
  - Implemented semantic versioning feature for CodeBuild so that customers can version their build output artifacts in buildspec
  - Added support for different format combinations including plain text, environment variables, executables and date format that maximizes customization for end users (Golang)
  - Configured GitVersion in Dockerfile for all CodeBuild curated images so that it can be used out of the box as an executable
  - Added unit tests and integration tests (cucumber) that ensures all features work end to end as expected

Academic Projects

- **Distributed Ski Data Processing Engine** — *Sept. 2017 – Dec. 2017*
  - Built a multi-threaded client that simulates up to 800k concurrent POST/GET requests being sent to server
  - Handled concurrent requests with multiple server instances (EC2) with a load balancer (ELB)
  - Added a metrics-capturing system using the publish–subscribe pattern, where raw metrics are calculated and sent to RabbitMQ, received by another server from the queue, and processed for data analytics
  - Rewrote the server-side logic in Node.js and replaced the original scaled server instances with AWS Lambda
- **Multiplayer Tic-Tac-Toe Game Platform** — *Jul. 2017 – Aug. 2017*
  - Developed an online Tic-Tac-Toe platform using the MEAN Stack that allows users to play with either the computer or another player online
  - Built the website frond end with AngularJS, created RESTful API endpoints with Node.js, and used MongoDB as data store
  - Incorporated Socket.IO into the project which enables real-time communications between multiple connected clients in an online game
  - Used Facebook/Google Sign-in services for social login and consumed a third-party Tic-Tac-Toe API for recommendations of computer moves
- **Algorithms Course Projects** — *Feb. 2016 – Apr. 2016*
  - Established a computational model to estimate the value of the percolation threshold via Monte Carlo simulation using the Union-Find Algorithm
  - Implemented an efficient, sorting-based algorithm to find every line segment that connects a subset of 4 or more of the points
  - Developed a solution to the 8-puzzle problem using the A* search algorithm

Technical Skills

- **Languages:** Java, Python, JavaScript, Ruby, Go, Scala, C, Racket, SQL
- **Cloud Technologies:** Docker, Kubernetes, OpenShift, Amazon EC2, Amazon S3, AWS Lambda, Heroku
- **Web Frameworks:** Bootstrap, AngularJS, Node/Express.js, Django, Ruby on Rails
- **Databases:** MySQL, SQLite, MongoDB, DynamoDB