

Lingtao Ge

Chandler, AZ | (248)-505-0196 | echosys.github.io | lingtao.ge@aexp.com

Education:

Arizona State University, Tempe, AZ	Dec 2019
<i>Computer Science, MCS</i> GPA: 3.7	
Arizona State University, Tempe, AZ	Dec 2018
<i>Computer Science, B.S.</i> GPA: 3.7	
Related Courses: Data Mining, Semantic Web Mining, Foundations of Algorithms, Database Management, Software QA and Testing, Software Validation, Human Computer Interaction, Information Assurance and Security	

Skills:

Java: Maven, Gradle, Vertx, Spark
Python: Ansible, Selenium, Scipy, Anaconda, pyDev
Golang: gRPC, protobuf, pprof
Technologies: Docker, Envoy, Kafka; AWS: EC2; JS: D3, Node, React; SQL: Cassandra, SQLite, PostgreSQL, MySQL;

Experience:

Software Engineer II, American Express, Phoenix, AZ	Jan 20-Present, 3yr
<ul style="list-style-type: none">• Implemented payment network microservices using Golang to manage client connections, accept and route transactions, as well as provide multi-datacenter failover and traffic shaping, with support for envoy sidecar• Built data pipeline using Spark for batch processing transactions for report generation• Technologies: Go, Docker, Envoy, Ansible, Github Actions, gRPC, protobuf, Java, Gradle, Vertx, Spark, Cassandra	
Software Engineer Intern, General Motors, Phoenix, AZ	May-Aug 18, 3mo
<ul style="list-style-type: none">• Implemented RESTful services with Mongoose web server to add functionality support for audio pipeline using ALSA library and GStreamer; Prototyped vehicle personal assistant with Houndify that is capable of using over 10 abilities in vehicle domains such as radio and HVAC control; Tested on 2018 Cadillac CTS• Technologies: Cpp and Python on AGL(Automotive Grade Linux), GIT, Android Dev, Prometheus Metrics, Grafana	
Software Developer Coop, Edupoint Educational Systems, Mesa, AZ	Jan-Aug 17, 6mo
<ul style="list-style-type: none">• Developed backend business logic for enrollment validation and concurrent report generation; Added and tested functionalities on SIS platforms to support report card generation and data analysis• Technologies: Visual Studio, Beyond Compare, .NET, Microsoft TFS, MS SQL, Swagger	
Software Engineer Coop, NXP Semiconductor, Chandler, AZ	June-Sep 16, 3mo
<ul style="list-style-type: none">• Designed and automated complex test process for IEC standard by pipelining instrument driving workflow; Integrated testing interface and application functionality for client demonstration• Technologies: C#, Java, GIT, cucumber BDD, Hashicorp Vault, Consul, SaltStack, Jenkins, Artifactory	
Software Engineer Coop, Freescale Semiconductor, Tempe, AZ	June-Nov 15, 6mo
<ul style="list-style-type: none">• Developed and tested an algorithm for two phased antennas to maximize power transfer using Monte Carlo search; Implemented API for bidirectional coupler and ADC through SPI bus for return-loss measurements on power amplifier application board• Technologies: C#, Java, GIT as version control, LabView, Agile, Fluentd ElasticSearch Logs,	

Project Experience:

Senior Design Project Inventory Scraping and Analytics
<ul style="list-style-type: none">• Automated business analytics process by scraping inventory from client's and competitor's site; Compared and analyzed inventory availability, and optimized efficiency with Chromium API to reduce scraping time for up to 30% [Python, SQLite, Chromium API]
Semantic Web Mining
<ul style="list-style-type: none">• Acquired patent data in JSON with Google BigQuery and used LDA algorithm to summarize the topics; then reduced dimensionality with TSNE. Clustered and visualized thousands of patents to five topics in one interactive graph using Bokeh [SciPy, NLTK]
Trend Analysis for Class Search
<ul style="list-style-type: none">• Utilized Selenium to scrape class enrollment; Get notified by email when a class becomes open or new seats added; Suggested the likelihood of getting into a closed class by studying past trends. [MySQL, AWS EC2]
Javascript D3 Data Visualization
<ul style="list-style-type: none">• Created visualization of interesting data that covers heatmaps, linked charts and text streams; Based on EuroVis' paper WordStream [Javascript D3, React, Node.js, HTML, CSS]