Andy Li

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Education

University of Waterloo   *September 2020 - April 2025*

BACHELOR OF COMPUTER SCIENCE

- 3.99 Cumulative GPA (94%)
- Rene Descartes National Scholarship - $25,000
- Contest Honor Roll (top 5%): Canadian Computing Competition Senior, Euclid, AMC 12 (AIME qualifier)

Skills

Languages: Golang, Java, C++, C, Python, SQL, JavaScript, HTML, CSS
Frameworks: React, Angular, Node, PostgreSQL, MySQL, MongoDB, Bootstrap 4, jQuery, NumPy
Tools: Git CLI, GitHub, GitLab, Perforce, Docker, SonarQube, Linux (Ubuntu, Mint, CentOS), Bash, Jira, Asana, VMware, Postman

Work Experience

Index Exchange   *September 2022 - December 2022*

SOFTWARE ENGINEER

- Introduced an additional targeting option for deals on the exchange using **Golang** by adding a custom field to two **REST API** routes, whose data is persisted in a **MySQL** database.
- Increased test coverage to 100% for all new code through writing hundreds of unit and integration tests in **Golang**, sending mock API requests through a **Swagger UI**, and debugging **Docker** container logs.
- Successfully deployed changes to production by deploying new **Kubernetes** pods in **ArgoCD** and monitoring impact of changes through **Grafana** dashboards and **Prometheus** alerts.
- Decreased code quality errors by 30% through adding **SonarQube** configurations and fixing **Gitlab CI/CD pipeline** defects.

OpenText   *January 2022 - April 2022*

SOFTWARE DEVELOPER

- Reduced size of device data files by 50% through implementing efficient device emulation filters in the AppWorks project.
- Increased customer satisfaction with the **OpenText TeamSite** product by implementing significant UI changes through the Customer Improvements project, using **Angular**, **jQuery**, and **JSP**.
- Improved code quality of 5 different TeamSite versions, each containing millions of files, through performing routine bug fixes and testing software changes on each version with **VMware** virtual machines.
- Upgraded TeamSite to **JDK 17** within 2 weeks by researching and testing JDK 17 compatibility with over 100 different services.

Mentum Group Inc.   *May 2021 - August 2021*

SOFTWARE ENGINEER

- Generated additional revenue for restaurants by using **React**, **React Hooks**, and **Redux** to create a delivery feature on the Mentum site that can integrate with restaurant menus and calculate tips, taxes, and delivery fees.
- Increased pickup and delivery efficiency for over 100 restaurants by developing a restaurant location picker app using **React**, revamping its user interface, and implementing an interactive map using the **Apple MapKit** Javascript plugin.
- Implemented backend services used by hundreds of thousands of customers for food delivery services like Uber and SkipTheDishes, by creating **gRPC protobuf** API endpoints and transforming external data to user-friendly formats using **Golang**.
- Maintained 100% customer data accuracy by managing and updating a 1 million line database using **PostgreSQL** CLI.

Projects

Build-A-Fleet

GITHUB.COM/ANDYLICAN/BUILD-A-FLEET

- Created a Star Wars themed web application using **Node** and **Express** that provides users a visual catalog of starships and allows them to plan their fleet through simulated purchasing.
- Fetched data with over 100 entries from the **Star Wars API** using **Fetch API** and stored data using **MongoDB**.
- Incorporated **EJS** dynamic templating to display affordable starships (MongoDB query) along with owned ships.
- Designed and built webpages using **HTML**, **CSS**, and **Bootstrap 4**, and deployed the app using **Heroku**.