Darren Li

Candidate for Bachelor of Software Engineering | University of Waterloo | Class of 2023

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SKILLS

- **Languages**: Python, C++, Java, JavaScript, SQL, YAML, HTML, Groovy, CSS, R, RISC-V, MIPS
- **Tools/Frameworks**: AWS, Kafka, Spring Boot, Node.js, Jenkins, Git, Avro, Maven, Junit, Mockito, Hystrix, Resilience4j, Express, Sumo Logic, New Relic, SNYK, Docker
- Other Skills: Linux, Bitbucket, IntelliJ, Jira, Teams, Confluence, Postman, VHDL, TortoiseSVN, Mercurial
- Excellent leadership and teamwork skills (Led development of feature, captain of sport team, coaching)
- 3X Term Dean's Honour List (Engineering)
- Courses: Data structures (93), Software Engineering Principles (OOP) (91), Database Systems (99)

EXPERIENCE

BACKEND/DEVOPS DEVELOPER (SPEECH RECOGNITION CONNECTOR) - GENESYS, MARKHAM   Sept 2020 – Current

- Led the development of transmitting over 40000+ text transcription Kafka events per minute to other services through API by designing a high throughput Java concurrent task scheduler
- Deployed Kafka consumer to consume various state change events, allowing our clients to communicate and notify our service about any important updates within milliseconds
- Integrated SNYK Security Platform into Groovy Jenkins pipeline script, eliminating over 30+ possible dependency vulnerabilities and attack types

DEVOPS/SOFTWARE DEVELOPER (VOICE PLATFORM) - GENESYS, MARKHAM, ONTARIO   Sept 2019 – Dec 2019

- Deployed and implemented AWS EC2 Auto Scaling and monitoring to our Docker Microservice to create a highly scalable and maintainable application, saving up to 70% in costs for regions
- Automated gdb crash cause debugging by taking ownership and integrating new features into Python script, increasing reporting speed by almost 400% by analyzing AWS core dump files and graphing data via Matplotlib
- Integrated CloudWatch dashboard and alarms for easy monitoring and alerts, allowing us to track application health such as CPU and memory usage; configured with AWS SDK for Python
- Developed AWS Cloud Formation templates in YAML that work across all AWS regions, allowing for easy and automated configuration during deployment

SOFTWARE QA ANALYST - SONOVA-UNITRON CANADA, KITCHENER, ONTARIO   Jan 2019 – May 2019

- Initiated development of Python tool to modify configuration XML files that increased testing speed by 70%
- Implemented C# script to update outdated language files, reducing manual verification by over 400%

PROJECTS

EzCollab – (Node.js, JavaScript, HTML, CSS) ezcollab.lidarren.me   Mar 2020

- Developed online screen sharing service to synchronously draw (HTML canvas) on a screen share video stream and easily collaborate with other web users
- Configured proxy for new connections via Nginx to establish a Socket.IO WebSocket connection to EC2 Instance Express server to track stream status and negotiate a WebRTC peer connection with the broadcaster

Garage Door Recognizer – (OpenCV, Python)   Dec 2019

- Developed image processing algorithm using OpenCV to determine garage door state, with over 90% accuracy, and notified users of any doors left open via email/SMS using a Raspberry Pi

RehabiliNation – MakeUofT 2019 **(2 category wins)** (Python)   Feb 2019

- Utilized Arduino and IMU sensors to allow people with disabilities to play modern arrow key games

BreadCrumbz – uOttaHack 2019 **(4th place overall)** (Python)   Feb 2019

- Developed algorithm to integrate the delivery of surplus supermarket produce to homeless shelters into commute route by utilizing Google Maps nearby search, directions, and route APIs

TEAMS

Robotics

- Designed and led mechanical system operation/design of VEX robotics team; developed gameplay strategies
- Established and grew club to over 50+ members; helped secure over $10,000 in funding

Sports

- Athlete of the Year; 4+ years of volleyball and badminton; YRAA Gold, OFSAA Antique Bronze, MVP; Intramural

OTHER QUAL.

- Vision Youth Leadership Program (Duke of Edinburgh Award – Bronze); practiced team building and leadership skills, project management to plan hikes, and Toast Master presentation skills