Tyrone Wu

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EDUCATION

North Carolina State University - Raleigh, NC — Cumulative & Major GPA: 4.0
Master of Computer Science — August 2022 - May 2023
Bachelor of Science in Computer Science, Minor in Statistics — August 2018 - May 2022

WORK EXPERIENCE

Undergraduate Grader - North Carolina State University — September 2021 - December 2021
Grader for CSC 422/522 Automated Learning & Data Analysis

- Graded general assignments and exams for both undergraduate and graduate section.
- Generated importable rubric templates/groups on Gradescope for assignments.
- Exported assignment evaluations with appropriate field mappings to support direct imports onto Moodle.
- Provided iterative feedback for final research projects on problem statement, methodology, method approach, experimental design rationale and analysis, and experiment results.

Software Engineering Intern - nCino, Inc. — July 2020 - August 2020

- Collaborated in a SCRUM team of developers to complete user stories and technical tasks as part of the Retail PDE Portfolio team.
- Created a Salesforce component that expands object details in response to user input to support granular display of custom retail information.
- Wrote Apex unit tests with at least 90% code coverage to ensure that business logic and error handling are covered.
- Worked alongside a mentor to resolve bug report tickets from both clients and other developers.
- Helped develop an XML DOM parser that automates field mappings and relationships for custom objects on the nCino data model using XPath and a custom internal library.

PROJECTS

Scientific Crowd Review Application (Sponsored by Oracle): Created a Stack Exchange-like web application for research publications/articles for the research community to open the traditional peer-review process to a crowd-review process, using Next.js, React, Micronaut, Oracle DB, and Oracle Cloud Infrastructure.

Kubernetes Multi-node Webapp Deployment: Automated the cloud deployment for a provided microservice, called the Footwear Webstore, that hosts the web app on a self-managed, Kubernetes multi-node cluster with only EC2 instances. Built using Docker, AWS EC2, Terraform, Ansible, Kubernetes, microk8s, and locust.io.

Automated Build, Deployment & Monitoring Pipeline: Implemented an automated build, test, deploy, and monitor pipeline for 3 different open source applications on an Ubuntu 20.04 image using VirtualBox to host the VMs, bakerx to provision the VMs and execute setup bash script, and Ansible to execute the build, test, and deployment tasks.

SKILLS

Languages	Java, Rust, Python, C, TypeScript, Javascript, SQL, Bash/Shell, YAML, HTML, CSS
Frameworks/Libs	Micronaut, Spring, AngularJS, React, JDBC, Junit, Selenium, Flask
Tools	AWS, Oracle Cloud, Git, Postman, Gradle, Ansible, Docker, Podman, Terraform, VirtualBox, Kubernetes, Minikube, Oracle DB, MySQL, MongoDB, Node.js, Unix/Linux, Anaconda, Figma, Jira, microk8s, locust.io
Concepts	Data Structures, Algorithms, Database Management, DevOps, REST APIs, Agile Development, Object-Oriented Programming, Data Mining, Data Wrangling, Microservice Architecture, Infrastructure as Code, Full Stack Development, Containerization, Orchestration

EXTRACURRICULARS

HackNC Hackathon 2022 (Award Winner): Developed a web application that centralizes a user's personal finance information with a customizable interface, using HTML, CSS, Typescript, React, Python, Flask, and SQLite.

Advent of Code: Completed 2015 in Golang and 2022 in Rust.