Tony Tian

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SKILLS SUMMARY

- **Languages and OS:** Python, GoLang, C++, C, Java, SQL, Bash Scripting, Linux/Unix-based Systems
- **Infrastructure and Tools:** Kubernetes, Docker, Jenkins, Travis, Git, Helm, Unix Tools, SVN

WORK EXPERIENCE

Software Developer | IBM Cognos Analytics   September 2018 – December 2018

- Extended a **GoLang** Vault tool with a CLI and event handlers; resolved major security flaws and migrated user data
- Established concurrency and pipeline patterns to improve performance for error-handling and timeouts
- Built a resource manager tool using **Kubernetes-Python API** and RBAC Auth to automate cluster-wide artifact syncs
- Implemented event handlers to create and update Secrets, Service Accounts, and Namespace resources
- Composed API mocking tools for test suites using **Python's Unittest** framework to reach **over 95% code coverage**

Software Developer | IBM Cognos Analytics   January 2018 – April 2018

- Developed a backend SFTP file upload system using **Kubernetes** and **Helm** for users to deploy custom resource packages
- Used **Unix** tools to implement SSH server handling for a SFTP system on **Linux** to resolve a production roadblock
- Containerized legacy web applications with **Docker** to be deployed in a **Kubernetes** managed cluster
- Improved a deployment tool to increase the efficiency of continuous delivery during pipeline integration testing

PROJECTS

STALK.bot | Hack the North

- Implemented facial feature tracking software using the **OpenCV** library in **Python** as well as predictive location tracking
- Created an automated rotating assembly with a webcam that follows the user's face using an **Arduino**

TCP Server/Client

- Developed a **Linux** based TCP network that can fork and handle multiple clients connecting simultaneously using **C**
- Incorporated the Socket API to implement and test the communication between the local client-server model

VEX Robotics

- Collaborated with five teammates as the lead programmer to produce a robot capable of climbing a pole independently
- Utilized the C-based programming language, **ROBOTC**, to measure and control the power output for harsh terrains

VOLUNTEER EXPERIENCE

Team Lead | IBM Future Blue   September 2018 – December 2018

- Planned and hosted a **Docker** learning session for over 30 interns as a professional development event for students
- Exhibited responsibility by budgeting resources, planning events, and directing scrum meetings

League Director | Vancouver High School Science Olympics   September 2015 - August 2017

- Designed a Decipher Wheel program in **Java** for students to solve during a large event consisting of over 200 participants
- Demonstrated professionalism by writing productivity and budget reports to the organization in Microsoft Excel

EDUCATION

University of Waterloo, B.A.Sc. Computer Engineering   September 2017 – Present

Interests: UW Badminton Club, Guitar, Math and Programming Contests, Science and Historical Fiction, and H2G2