

Joshua Chang

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SKILLS

Languages: Java, Python, C++, R, SQL, BASH, HTML/CSS, JavaScript

Tools and Libraries: Git, Jenkins, Jupyter Notebook, sklearn, Tableau, Pandas, NumPy, Matplotlib, Seaborn, Streamlit

EXPERIENCE

SAP Pioneer Canada

January 2022 – April 2022

DevOps Engineer

- Upgraded **Jenkins** production server and associated plugins to address security and vulnerability issues, while also **increasing job performance build times** and **CI/CD pipelines** by **15%**
- Worked with SAP Insurance software service codebase to upgrade **Log4J API**, finding suitable solutions for deprecated functionalities and customizing the API implementation to be compatible with various plugins and supporting APIs
- Created a BASH shell script to **automate** the process of **backing up SQL databases** to populate Nexus repositories, reducing the amount of manual labor spent by **85%**

PROJECTS

NHL Stat Tracker 🔗

Python, Jupyter Notebook

- Created a webapp with **Streamlit** to display regular season statistics of NHL teams and skaters, providing **key performance indicators** that contribute to team success
- Collected, cleaned, and filtered 3k+ rows of data using **Pandas** and **NumPy** to provide graphic analytical insights using **Matplotlib** and **Seaborn**

Volleyball Statistics Program 🔗

Java

- Developed an application to track offensive and defensive statistics of players and the team, supplying **analytical feedback** to athletes and coaches to achieve success in future matches
- Implemented a **GUI** to enhance user experience, displaying average scores and percentages of each statistic using **OOP, Methods, and ArrayList/Array Manipulation**

hy-bird. 🔗

Java, XML, JSON

- Collaborated with a cross-functional team using Git to develop an app using **Android Studio** that eases the transition for employees from home to office, **streamlining the hybrid work environment**
- Created a functional login and user dashboard with an integrated OpenWeather API, **parsing JSON data** to display the 5-day weather forecast according to city location entered by the user

AWARDS AND ACHIEVEMENTS

WatPD Engineering Scholarship

May 2021

- \$4000 scholarship awarded to one student in each engineering program (1 of 130 students) who has demonstrated academic excellence and the potential to thrive in professional skill development

John E. Betts "Beat Yesterday" Scholarship

January 2021

- \$2500 scholarship given to an individual striving to improve every day at school, in the community, and on the job

EDUCATION

University of Waterloo

Waterloo, ON

Candidate of Bachelor of Applied Science in Systems Design Engineering

2021-2026

- Relevant Coursework: Data Structures and Algorithms (C++), Human Factors in Design

CERTIFICATES

Google Data Analytics Specialization

- Utilizing tools and platforms including SQL, R, Tableau, and spreadsheets to prepare, process, analyze, and share data

Coursera Introduction to Machine Learning in Sports Analytics

- Exploring supervised machine learning techniques using sklearn toolkit to understand machine learning algorithms and predict athletic outcomes