9541 Erickson Drive, Burnaby, BC https://YashSerai.github.io/

778-231(6707) yashserai1@gmail.com

### TECHNICAL SKILLS

Programming Languages - C, C++, R, Java, JavaScript, Kotlin, Python, SQL, Matlab, Go

Frameworks & Libraries - TensorFlow, PyTorch, Numpy, React.js, MongoDB, SQLlite, Git, Unity, Android Studio, JUnit, Django Soft Skills - Organization skills, Attention to Detail, Accountability, Patience, Multitasking, Time Management, Critical Thinking, Creativity

## **Work Experience**

# **System Administrator Intern**

March 2024-Present

#### CJSF Radio Station, Burnaby, BC

- Monitored and optimized server performance, leading to a 20% reduction in system downtimes and improving overall station operations.
- Developed detailed technical documentation for system configurations and troubleshooting procedures, significantly reducing resolution time for common issues and supporting efficient onboarding of new team members.
- Assisted in the setup and maintenance of network infrastructure, including configuring routers, switches, and firewalls, which improved network security
  and data flow by 25%.
- Implemented automation scripts for routine tasks, reducing workload by 40% and ensuring consistent system maintenance across various platforms

# **Software Developer Intern**

Mar 2022-Dec 2022

## Pakiza Textile, Dubai, UAE

- Identified and resolved software bugs and issues, contributing to a 15% increase in system stability and receiving commendation from the team for meticulous debugging and code optimization.
- Authored comprehensive documentation for Inventory management project, significantly reducing onboarding time for new team members and contributing to the knowledge-sharing culture within the development team.
- Assisted with the development and implementation of a real-time inventory tracking system, resulting in a 30% reduction in stock discrepancies and enhancing overall accuracy in inventory management processes.

## **Technical Projects**

### Text generation and attention - Python, NLP, Attention, PyTorch, Git

Jan 2024

- Implemented attention mechanisms in a pre-trained sequence-to-sequence (seq2seq) neural machine translation (NMT) model, significantly improving translation performance.
- Optimized the NLP model's performance by implementing and fine-tuning attention mechanisms, resulting in a reduction in inference time.
- Demonstrated expertise in virtual environment setup and package management using Python's venv and pip, ensuring a smooth development process for the NMT model.
- Produced a comprehensive report summarizing the task, describing the implemented method, presenting both quantitative and qualitative results, and discussing alternative methods, contributing to effective documentation practices.

### **Digit Recognition - Python, CNN, Preprocessing, TensorFlow, Git**

Sept 2023

- Designed and developed a convolution neural network model in Python, showing expertise in machine learning and artificial intelligence.
- Successfully preprocessed the MNIST dataset, including data loading, normalization, and augmentation, ensuring optimal model training.
- Overcame challenges in model training and optimization, showcasing problem-solving skills crucial in machine learningdevelopment.
- Maintained detailed code documentation, including comments and clear function descriptions, facilitating easy understanding.

#### **Sudoku Translation App -** Android, Agile, Testing, Java, Git, Kotlin

Feb 2023

- Designed and developed a multifunctional Sudoku app for Android that integrates language learning, offering users a unique and engaging educational experience.
- Successfully applied Agile software development methodologies to manage the project's timeline, prioritize tasks, and adapt to evolving requirements as part of a collaborative team effort.
- Utilized external file storage for the list of words to enable seamless data updates and customization options, enhancing the app's user-friendliness and adaptability.
- Conducted thorough testing, including unit testing and user testing, to ensure the app's functionality, responsiveness, and stability, resulting in arobust and reliable application.

# Automated Inventory Management System for Textiles - Web Dev, Documentation, Django, Database Management

Dec 2022

- Developed and implemented a user-friendly web-based inventory management system tailored for the textile manufacturing industry, significantly improving efficiency in tracking and managing raw materials and finished products.
- Designed and implemented real-time data synchronization functionality, ensuring accurate and up-to-date inventory information for users across various departments.
- · Developed and maintained documentation, including user manuals and documentation, to assist end-users and ensure system sustainability.
- Collaborated with cross-functional teams to gather requirements, design the system architecture, and integrate it seamlessly into the existing workflow, resulting in a streamlined and automated inventory control process.

#### **EDUCATION**

# Simon Fraser University, Burnaby BC

August 2024