

Tanvir Singh

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EDUCATION

McMaster University

Hamilton, ON

B.A.Sc Computer Science Co-op (Minor in Information Systems)

2021 – 2025

- Currently Enrolled in Year 3 (Junior Year) with a Cumulative GPA of 3.9 out of 4.0
- Dean's Honour List recipient for Freshman and Sophomore years
- **Coursework:** Data Structures and Algorithms, Object Oriented Programming, Databases, Data Mining, Advanced Algorithms and Complexity, Information Security, Operating Systems, Systems Design and Analysis, Data Analytics, Software Design, Information Systems, Computer Architecture, Computer Networks and Security

EXPERIENCE

Software Developer Intern

May 2023 – August 2023

FT Consultants, Inc.

West Palm Beach, FL, USA

- Developed multiple full-stack web applications using React, Node, Express, and MongoDB working with a dynamic team of software engineers using the Agile methodology.
- Collaborated with the QA team to successfully identify and troubleshoot over 50 critical issues.
- Designed and developed a dynamic and interactive UI using JavaScript, React.js and Bootstrap enabling real-time updates and improving overall user interaction improving user retention rate by 45%.
- Implemented a secure user authentication and file management API, allowing users to upload sensitive documents through the application's interface leading to a 30% increase in operational efficiency.
- Drafted 10+ design and technical specification documents and displayed excellent verbal communication skills in daily stand-up meetings resulting in a 20% increase in the team's development efficiency.

PROJECTS

MoneyMachine | *Python, TensorFlow, NumPy, scikit-learn, Pandas*

- Developed MoneyMachine, a robust stock market prediction model leveraging LSTM neural network architecture.
- Incorporated feature engineering techniques to preprocess and transform raw data into meaningful input features for the LSTM model.
- Conducted thorough backtesting and validation to assess the model's predictive accuracy and evaluate its performance across different market conditions.

ScribbleScan | *JavaScript, Python, React, Django, TensorFlow, Pandas, Numpy*

- Developed ScribbleScan, a web application utilizing neural network technology for handwriting recognition.
- Utilized TensorFlow to train and deploy the neural network model after rigorous testing and validation.
- Designed an intuitive user interface using React for seamless image upload and display of recognized text output.

CERTIFICATIONS

Machine Learning Specialization

January 2024

Stanford University, DeepLearning.ai

- Acquired proficiency in foundational machine learning concepts, including supervised learning, unsupervised learning, deep learning, data preprocessing, feature engineering, regularization, optimization, and more.
- Implemented machine learning algorithms like regression, k-means clustering, KNN, neural networks and more both from scratch and using Pandas, NumPy, scikit-learn, TensorFlow, and Keras.

Cybersecurity Professional Certificate

June 2023

Google

- Gained hands-on experience with industry-leading security tools such as Splunk, Chronicle, WireShark, Suricata, and tcpdump and a deep understanding of network principles, network architecture, firewalls, VPNs, TCP/IP, HTTP and more.

SKILLS

Languages: Python, Java, JavaScript, HTML/CSS, C, SQL, ARM Assembly, R

Libraries and Frameworks: React.js, Node.js, Express.js, NumPy, TensorFlow, scikit-learn, Pandas

Technologies: MongoDB, Git, Bash, WireShark, tcpdump, Tableau, JMP, Excel, JSON