# **Choyon Uddin**

(647)-234-2470 | choyonuddin17@gmail.com | LinkedIn | GitHub | Toronto, ON

### **EDUCATION**

# **Toronto Metropolitan University (Formerly Ryerson University)**

Expected 2025

- Bachelor of Science in Computer Science, Minor in Psychology
- Metropolitan Data Science Association (MDSA) Associate, Computer Science Union (CSU) Associate

### **SKILLS & CERTIFICATIONS**

**Certifications:** IBM Data Science Professional

Programming Languages: Python, Java, C/C++, HTML/CSS. Javascript, PHP, R, SQL, Bash, Elixir

Frameworks/Libraries: NumPy, Pandas, Pytorch, Tensorflow, SciPy, Matplotlib, NodeJS, React, Pillow, Seaborn, Bootstrap, JQuery

Developer Tools: VScode, MongoDB, Hadoop, Oracle, Git/Github, Linux, Unix, Jira, Testrail, Confluence, Microsoft Suite,

Android/iOS SDK tools, Anaconda, Jupyter, Eclipse

### **WORK & LEADERSHIP EXPERIENCE**

theScore Toronto, Canada

Quality Assurance Analyst Intern

September 2022 – May 2023

- Conducted cross-platform testing initiatives across Android, iOS, and web applications, performing an exhaustive evaluation of theScore Media and Betting platforms to improve production readiness
- Validated software functionality by designing and performing ~3000 user acceptance and system integration tests, cutting time spent on regression and manual testing by 20%
- Collaborated with cross-functional teams through Slack and Atlassian Suite (Jira, Confluence) to successfully deploy major features (Move The Line and Parlay+) on the Score Bet platform. Took ownership of multiple test suites in Testrail, ensuring full test coverage and adherence to quality standards while facilitating efficient communication and issue resolution
- Developed automated testing scripts, achieving a 40% reduction in testing time and a 30% increase in test coverage
- Documented, tracked, and prioritized software defects using Atlassian Suite streamlining bug reporting workflows and improving resolution efficiency by 15%. Facilitated clear communication between QA and development teams to ensure timely fixes and adherence to release schedules

#### **PROJECTS**

# Big Data Predictive Modelling Solution for Marketing Intelligence | Data Science, R, RStudio, Shiny & ggplot2

- Delivered a multifunctional software solution for a Corporate Marketing Intelligence client, analyzing ~100 gigabytes of user data to identify factors driving product subscriptions and provide actionable insights
- Leveraged extensive data preprocessing, manipulation, and Machine Learning algorithms including K-Nearest Neighbors (KNN) and K-means Clustering in conjunction with Shiny and ggplot2 to prepare predictive visual models
- Enabled a 30% improvement in client's market positioning through data-driven marketing strategies and advanced analytics

# **Envision: AI-Driven Accessibility Platform** | OpenAI, PyTorch, Pillow, Python

- Collaborated within a multidisciplinary software development team to design an AI-powered assistive tool for visually impaired users, integrating transformer-based object detection (Facebook's DETR ResNet-50) and Large Language Models (LLMs) for real-time intent analysis to enhance accessibility
- Designed a modular system using Python, PyTorch, and OpenCV, enabling seamless object detection, scene understanding, and audio-based output. Processed live video streams to identify objects with 90% confidence and infer contextual intentions, providing natural language descriptions for enhanced environmental awareness
- Oversaw project management, task coordination, and quality assurance ensuring timely delivery and product effectiveness

## Keras Database Deep Learning Solution | Machine Learning, Neural Networks, TensorFlow, Keras, Matplotlib, Numpy, Python

- Implemented a Machine Learning model solution to identify handwritten symbols from the MNIST Database in Keras
- Built Neural Networks model using a sequential architecture with multiple simple and dense layers that utilizes the ReLU
  and Softmax activation functions across 300+ neurons to identify symbols from the MNIST database
- Achieved 100% accuracy across ~20 epochs, validating the model's reliability and precision in symbol identification.

# GymBro | Python, SQL, Pandas, Seaborn, SciPy, Matplotlib, Numpy & Supabase

- Created an innovative fitness tracking and analytics platform, Intuitively integrating data analysis and visualization, curating a personalized fitness portfolio for 20+ patrons, enhancing user fitness experience
- Engineered a pragmatic Workout Logging system, capturing biometric, anthropometric, and hypertrophic data
- Boosted patron satisfaction by 80% using advanced algorithms to analyze personalized user fitness data, providing users with a rich understanding and personal optimized workouts through visual models and insights on health trends

### **QRCoder** | Python, Html, CSS, Git/Github pages, JavaScript, Flask

- Engineered a robust QR code generation system that seamlessly integrates with various media formats, such as hyperlinks, images, textual data, and multimedia content, using advanced algorithms for 100% encoding accuracy and efficiency
- Delivered high-performance QR code generation through a user-friendly interface built with HTML, CSS, and JavaScript.