ROBERT CIBOROWSKI

www.robertciborowski.com
www.github.com/Robert-Ciborowski

Toronto, ON, Canada
m: 416-825-0602
robert.ciborowski@mail.utoronto.ca
LinkedIn

Proficiencies

Languages: Python, C++, Java, MySQL, PostgreSQL, Cassandra, JavaScript, C, R, GLSL, HTML, English, Polish
Tools: Git, AWS, React, Kafka, Flask, JQuery, PyTorch, TensorFlow, Pandas, NumPy, OpenGL, OpenAL, OpenCV, SDL
Practices and Platforms: CI/CD, Unit Testing, Linux, Windows, MacOS, Android

Education

Bachelor's of Computer Science **Graduating in May 2023**
University of Toronto - Finished 3rd year studies
Specializing in Artificial Intelligence, **Minoring** in Statistics, Economics
GPA: 3.79/4.0, **Honors:** Dean's List (6 semesters)
Relevant Courses: Data Structures, Systems Programming, Software Design, Enriched Theory of Computation, Mathematical Reasoning for Computer Science, Calculus I & II, Statistics for Computer Science, Linear Algebra

Work Experience

Meta, Software Engineer Intern – PHP, React, SQL **2022**
- Working on development tools for Facebook.

RBC Capital Markets, AI Engineer – Python, KDB, PyTorch, Cassandra, Pandas, Numpy, Kafka **2021-2022**
- Improved code architecture of Aiden, a reinforcement learning algorithm which had traded over $100 billion in securities, so that the architecture is cleaner, more computationally efficient and scalable.
- Created a transfer learning tool which was used to reduce the training time of a new trading algorithm from several months to 2 weeks while costing less money to train.
- Built and ran experiments for various machine learning models to collect and report their performance.
- Improved trading performance by creating a new rewards system for the RL model to learn from.

Rules Cube, Machine Learning Engineer – React, Node.js, AWS, TensorFlow, Python, Pandas, Numpy **2020**
- Built a machine learning API using AWS services such as EC2, ECS, SQS, DynamoDB, Amplify and CodePipeline.
- Wrote an image annotation tool using React, Javascript and Auth0.
- Led a team of 10 annotators to double a dataset's size to 10,000 images.
- Redesigned a natural language processing model for improved inference speed and 4% higher accuracy.
- Wrote technical design documents for current and future employees explaining how the API works.

Notable Projects

Neo-Zero – C++, OpenGL, Python **2016-2021**
- Created this Kickstarter funded, C++ and Python based 3D game with the help of Git.
- Project obtained over $1,800 CAD in funding and is now on sale on the Steam platform.
- Created the multithreaded and open-sourced 3D engine, "Project Aela", using C++, OpenGL, Git, OpenAL, SDL, FreeType and Zlib. Created a 3D and 2D renderer, compressed audio loader & player, animation system, event framework, menu system and resource manager.

Metagram – React, Node.js, MongoDB, Google Cloud, OpenCV **2022**
- Won 1st place, Best Use of Google Cloud and Small Business Challenge at the UofT Hacks IX hackathon.
- Created a social network which uses augmented reality to enable people to share their artistic creations.

Cryptocurrency Price Distribution Prediction Using Neural Networks – Python, TensorFlow **2021**
- For a final course project, wrote a research paper which evaluates several deep-learning model architectures and technical indicators to predict the next-day price distribution characteristics of cryptocurrencies.

The Iron Bears Robotics – Java **2016-2018**
- Worked on a FIRST Robotics Competition robot's sensor communication, motor driving, human control, camera stream and a proportional-integral-derivative automation system in the Java programming language using Git.