ANDREW BLOCKI

AndrewBlocki.com • arblocki@umich.edu • (248) 880-1361
Ann Arbor, MI

EDUCATION

UNIVERSITY OF MICHIGAN — **Ann Arbor, MI**

College of Engineering

Bachelor of Science in Computer Science, May 2021

- Cumulative GPA 3.5/4.0
- Completed Coursework: Data Structures and Algorithms, Database Management Systems, Introduction to Machine Learning, Introduction to Computer Organization
- Fall 2020 Coursework: Conversational AI, Applied Parallel Programming with GPUs

COURSERA.ORG

- Completed 8 courses in Web Development & Design, including responsive front-end (HTML, CSS, JavaScript, jQuery, Bootstrap) and back-end (PHP, SQL) development basics

EXPERIENCE

TD AMERITRADE — **Ann Arbor, MI**

May-Aug 2020 — **Software Engineer Intern**

- Developed new features and implemented bug-fixes on an automated investment platform built in React and Redux
- Updated several Java-based Spring microservices to maintain application security and increase cache hit-rate to over 99.5%
- Worked in a Scrum-based Agile development team, releasing new software every 2 weeks

May-Aug 2019 — **NLB CORPORATION** — **Wixom, MI**

Information Technology Intern

- Refactored SQL queries to new database, improving query response time by up to 80%
- Automated data processing for Quality Control team by implementing Visual Basic software within existing Excel spreadsheets as well as JavaScript within fillable PDF forms
- Performed routine updates and repairs of PC, printer, and server hardware

PROJECTS

NBA Neural Network Model [Python, ReactJS, MongoDB]

- Built neural network deep learning model using the PyTorch machine learning library to project NBA final scores and make predictions against the point spread, achieving a long-term winning percentage of over 55%
- Coded Python scripts to automatically collect data from recent games, calculate updated player ratings, and build input data for upcoming games
- Created web app using MERN stack (MongoDB, Express, ReactJS, Node.js) to view game projections and predictions against the point spread -- NBANeural.net

Spotify Playlist Generation Web App [PHP, SQL, JavaScript, Bootstrap]

- Engineered web app with Spotify Web API that allows Spotify users to generate new playlists of recommended songs based on select current playlists & favorite songs
- Programmed PHP scripts to collect and analyze data from playlists and artists on Spotify
- Designed MySQL database to track user login and playlist creation

Euchre Simulator [C++]

- Developed Euchre card game simulation that users play within Linux terminal
- Used object-oriented programming and polymorphic classes to represent players that either follow strategy automatically or are controlled by user

SKILLS

Experienced in: C++, Python (PyTorch, Pandas), JavaScript, ReactJS, HTML, CSS, PHP, SQL

Exposure to: Java, Node.js, MongoDB, Redux, AWS, Bootstrap