

## EDUCATION

## **UMSL, UNITED STATES**

BS IN COMPUTER SCIENCE CERTIFICATE IN DATA SCIENCE CERTIFICATE IN ARTIFICIAL INTELLIGENCE August 2018 - May 2023

## LINKS

LinkedIn:// aidenhclark Github:// aidenclark

#### **UNDERGRADUATE**

Data Structures and Algorithms
Operating Systems
Deep Learning
Java Web Development
Object Oriented Programming
Machine Learning
Artificial Intelligence
Data Mining
Python for Scientific Computing
Data Science
Operating Systems
Compilers
Intro to .NET Programming

## SKILLS

#### **PROGRAMMING**

Java • C • Python • C# • SQL • HTML • CSS JavaScript • Tailwind • Node.js • React Angular •.NET

#### **TOOLS**

Eclipse • IntelliJ • Visual Studio Code • PostgreSQL • SQL Server Management Studio

#### **OTHERS**

Amazon AWS • Web Services • Microsoft Azure

## **INTERESTS**

Travelling • Camping Sports • eSports • Music Problem solving

# ACHIEVEMENTS AND

## ACTIVITIES

- NCAA All American
- Active on programming site -GitHub
- Dean's List All Semesters
- Enrolled at Honors College
- 5 Time Academic All GLVC
- UMSL Swim Team Captain

## STATEMENT

Currently honing my skills in web development by creating captivating and user-friendly websites using a wide range of web technologies, from C# and CSS to JavaScript and beyond. With a strong eye for design and a knack for problem-solving, I thrive in creating engaging online experiences.

## **EXPERIENCE**

#### FEDERAL RESERVE BANK OF SAINT LOUIS | INTERN

June 2022 - Ongoing | Saint Louis

- Designed and implemented web-based solutions to meet organizational needs as a web developer.
- Worked with a team to create and maintain a user-friendly website for both internal and external users.
- $\bullet \ \ \text{Developed} \ \text{and tested new features, troubleshooted issues, and performed regular updates for optimal site performance.}$

### MIDWEST POOL MANAGEMENT | MANAGER

April 2021 - February 2022 | Saint Louis

- Coordinated daily operations and scheduling at outdoor pools.
- Implemented marketing strategies, hosted events, arranged swimming instruction, and recruited staff.
- Demonstrated leadership skills, knowledge of lifeguard standards, and a strong focus on teamwork and customer satisfaction.

## **COLLEGIATE ATHLETE** | UMSL SWIM TEAM CAPTAIN

August 2019 - March 2023 | Saint Louis

- Organized formal and informal meetings to improve team communication.
- Demonstrated leadership as the team captain. Successfully balanced a full academic course load with competition, practices, training sessions, and meetings.
- Achieved accolades as a swimmer, including NCAA All American, 4-time academic all GLVC, and swim team captain.

## **PROJECTS**

## SENTIMENT ANALYSIS WEB APP | ONGOING PERSONAL PROJECT

- Created a Django web app that utilizes JavaScript, HTML, CSS and Python to calculate real-time sentiment analysis on prodcuts, people, stocks, etc..
- Uses an Amazon RDS database on an Amazon EC2 instance to run.

#### STROKE PREDICTION MACHINE LEARNING | FINAL YEAR PROJECT

- Proficiency in using Tensorflow/Keras for building, training, and evaluating feed-forward neural networks.
- Applied learned skills to handle standard tabular data for classification or regression tasks.

#### COVID-19 PREDICTION USING X-RAYS | FINAL YEAR PROJECT

- Report utilizes two deep learning strategies for accurate prediction of COVID-19 in patients.
- First strategy involves a modified convolutional neural network for improved performance.
- Second strategy employs the more complex VGG-16 architecture for enhanced accuracy.

#### USER RECOMMENDATION SYSTEM | INTERN PROJECT

- Designed a successful recommendation system for an internal website.
- Utilized collaborative filtering, matrix factorization, and natural language processing techniques.
- Gained hands-on experience with machine learning libraries including scikit-learn and TensorFlow.

## CREATED AN OPERATING SYSTEM | FINAL YEAR PROJECT

- Developed a comprehensive operating system incorporating system calls, library functions, concurrent processes, shared memory, semaphores, message passing, process scheduling, resource management, and memory management.
- Gained in-depth understanding of fundamental concepts in computer science and operating systems through the project.

#### CREATED A COMPILER | FINAL YEAR PROJECT

- Constructed a functional compiler capable of translating a subset of a modern programming language into simple assembly or machine language.
- Implemented a virtual machine for executing the compiled code.
- Demonstrated proficiency in various concepts including lexical analysis, syntax analysis, semantic analysis, code optimization, and code generation throughout the compiler development process.