

Education

Rowan University - 3.944 GPA

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Related Coursework: Operating Systems, Software Engineering, Programming languages, Unix systems, Artificial Intelligence, Design & Analysis of Algorithms, Computer Graphics, Computer Animation

Glassboro, New Jersey

Sep. 2020 - Dec. 2021

Experience

Machine Learning/Code Generation Research

UNDER DR. BO SUN, SPONSORED BY ASRC

- Initiated 100s of hours of research to implement a machine learning model to generate comments given code.
- Pioneered a program to scrape over 20,000,000 in Java, C++, and over 20 of the most popular languages.

East Brunswick, New Jersey

Dec. 2020 - present

Natural Language Processing Research

UNDER DR. KAI WANG, SPONSORED BY LSAMP

- Computed the novelty of a document relative to 1,000,000s of other documents within the same subject space.
- Devised an algorithm to optimize populating and sectioning a graph with over millions of data nodes.

Union, New Jersey

Sep. 2017 - Jan. 2018

Virtual and Augmented Reality Research

UNDER DR. JENNY LI, SPONSORED BY STEMPACT

- Researched ability of virtual and augmented reality to be implemented and survive in the marketplace.
- Achieved 1st place in final evaluation at Kean STEMPact after 8 months of research and experimenting.

Union, New Jersey

Oct. 2016 - May. 2017

Projects

DevOps for IPC Namespace

LEADER OF C & PYTHON APPLICATION FOR ASRC

- Led a team of 5 developers to create a GUI in python to visualize all metrics collected in real time.
- Produced an automatic build system for C compiling for my team so they could write and link code 200% faster.

East Brunswick, New Jersey

Jan. 2021 - May. 2021

Vulkan RTX Engine

WAFFLES ENGINE

- Designed a C++ Engine using Vulkans API to facilitate rendering for the graphics pipeline and the RTX Pipeline.
- Developed purposefully for 150% speed increase using concurrency, data oriented design, and cache friendly data.

Sparta, New Jersey

Dec. 2020 - present

Vofog

C++ & LUA COMPLETE GAME ENGINE

- Architected a fully featured C++ engine with a heavy focus on scalability, performance, and ease of operation.
- Composed of an intermediate mode GUI, Lua scripting, batch rendering, and entity component system support.

Sparta, New Jersey

Jan. 2019 - Sep. 2019

NLParallel

MACHINE LEARNING CONNECTION GENERATOR

- Generated a connection, using Natural Language Processing & Python, between any 2 general topics.
- Created code that scrapes, archives, and populates data in a graph to allow fast lookups between 2 "topic" nodes.

New Brunswick, New Jersey

Jan. 2018 - Aug. 2018

A2B

HACKATHON PROJECT BUILT IN 24 HOURS

- Administered 1,000s of users the ability to utilize GoogleMaps, without internet, through SMS technology, Twilio, & Flask.
- Accumulated both the 2nd place and "Hackers Choice" prize for "The Greater Cause" with technology in 24 hours.

Glassboro, New Jersey

Feb. 2017

Skills

Computer Science

TECHNOLOGY/CONCEPTS I AM PROFICIENT IN

- C++, C, Java, Python, JavaScript, Rust, React, Jekyll, OpenGL, LibGDX, TensorFlow, Vulkan, DirectX, Swing, JavaFX, HTML
- Frontend, Backend, DevOps, Algorithms, Rendering, Data-Oriented-Design, Machine Learning, Performance Computing
- CMake, Makefile, MinGW32-64, MSYS, POSIX, SYSV, Unix, Build Systems, g++, GCC, VSCode, GDB, AWS, Cyber Security