

RITCHIE

RIT2000@rit.edu | 555.555.5555

EDUCATION

RIT

BS/MS IN COMPUTATIONAL
MATHEMATICS AND COMPUTER SCIENCE
Expected May 20xx | Rochester, NY
College of Mathematical Sciences
Cum. GPA: 3.897 / 4.0

LINKS

Github://rit2000

LinkedIn://ritstudent

COURSEWORK

MATHEMATICS

Multivariate and vector calculus
Discrete mathematics
Differential Equations
Probability and Statistics

Linear Algebra

Advanced Linear Algebra

Real Analysis I & II

Codes and Ciphers

Complex Variables

COMPUTER SCIENCE

Computer Science with AP

Mechanics of Programming

Computer Science Theory

Analysis of Algorithms

Introduction to Software Engineering

SKILLS

MATHEMATICS

Calculus • Discrete mathematics • Linear
Algebra • Differential Equations •
Difference Equations • Probability •
Statistics • Game Theory • Cryptography

PROGRAMMING

Over 5000 lines:

Java • C • C++ • Shell/Bash • JavaScript
(ES6 and Typescript)/Node.JS •
HTML/CSS • Python • $\text{L}^{\text{A}}\text{T}^{\text{E}}\text{X}$

Over 1000 lines:

C# • Matlab • Mathematica

Familiar:

• Ruby

WEB FRAMEWORKS

• Angular 2 • Express • Django

EXPERIENCE

SIEGE TECHNOLOGIES | SOFTWARE ENGINEERING INTERN

June – August 20xx

- Developed code on the Cyber Quantification Framework (an automated cyber-attack simulation test-bed).

INTERNSHIP AT FOVIA | SOFTWARE ENGINEERING INTERN

June – August 20xx

- Developed an Angular 2 web based volume rendering application using the Fovia Web API. This application is used for customer demonstration of the Fovia Web SDK.
- Developed a Web API layer that enables 2D and 3D volume rendering through client-side JavaScript. This enables Fovia's developers to more easily create client-side HTML5-based applications that run from the cloud or over a WAN.

PROJECTS

AUTOMATED ASL INTERPRETER May 20xx - Current

- Constructed an automated Sign Language recognition program
- Language: Java

BLINDSIGHT November 20xx - current

- Constructed an application that converts image and video data to sound
- Can be used by the blind to gain a sense of sight
- This project won the 2016 Magic Cup at RIT in the humanities category
- Language: Java (Android)

AWAKE February 20xx - current

- Constructed a system to detect and alert the user upon drowsiness
- Languages: C (Arduino), Javascript (Node.JS), Java (Android)

RESEARCH

REINFORCEMENT SWARMING ALGORITHMS | UNDERGRAD

RESEARCH

February 20xx - Present | Rochester, NY

Professor Ifeoma Nwogu and I are currently researching applications of reinforcement learning into various swarming problems (such as flocking and search and rescue). Presented topic at AMMCS2017.

MODELLING AVIAN BRAINS | UNDERGRAD RESEARCH

October 20xx - Present | Rochester, NY

Currently working with Professor Radin and Professor Babbit to model (using a neural net with a lattice topology) mammalian brains and avian brains to determine how the higher packing density of neurons in avian species effects various learning tasks. Presented topic at AMMCS2017

NEURAL NET DIFFERENCE EQUATIONS | UNDERGRAD RESEARCH

September 20xx – August 20xx | Rochester, NY

This paper analyzes neural networks with cyclic connections of length modulo 3. The abstract can be found here. I conducted this research with Professor Radin.

AWARDS

2015-2019 RIT Full Presidential Scholarship

2016 RIT Magic Cup - first in humanities category

2017 AMMCS2017 - Travel Grant