

# Chukwuemeka Emmanuel Okafor

✉ eco6880@rit.edu ☎ 9146563330 in EmmanuelOkafor 🌐 https://eco438.github.io

## Education

---

### Rochester Institute of Technology

MS Computer Science 2022  
BS Electrical Engineering 2020  
GPA: 3.7/4.0

Aug./'20 - May/'22

Relevant Coursework: Foundation of Computer Vision, Natural Language Processing, Intro to Artificial Intelligence, Understanding Human Behavior Dynamic, Foundation of Algorithms

## Work Experience

---

### Xylem Inc

*Software Development Intern*

Rochester, New York  
June/'20 - Present

- Initially familiarized with project by surveying and improving unit test coverage.
- Made a process improvement to standardize product reports: T4 Templates for text generating, and HTML/CSS for re-usability over old PDF graphic-drawing code.
- Evaluated and recommended various improvements to desktop deployment(Installers) to adapt to urgent customer needs
- Developed a template, and tutorial for teammates on utilizing new Installer

### Summer Research Opportunities Program

*Research Intern*

Notre Dame, Indiana  
May/'19 - July/'19

- Designed an optical setup used to acquire scattering and absorption coefficient from a tissue phantom for frequency-domain optical spectroscopy.
- Recorded optical power data produced by the laser photodiode for analysis purposes.
- Presented the hardware prototype at the Summer Undergraduate Research Symposium at the University of Notre Dame.

### Intel Corporation

*Test Technology Intern*

Hudson, Massachusetts  
June/'18 - Dec/'18

- Developed additional functionality to test scripts to support the development of intel's 14nm chips and added documentation for future use.

### MKS Instruments

*Reliability Engineering Intern*

Rochester, New York  
Jan/'19 - May/'19

- Developed a python program to automate the collection of reliability testing data and data formatting for the company.
- Performed multiple failure analysis for customers' components to verify functionality.
- Analyzed design parameters and subsequent component's stress cases to verify equipment are functioning properly.

## Projects

---

### Automatically detecting and recognizing text in natural images

June/'20 - Aug./'20

Designed a system to detect and recognize text from unstructured images

### Predicting Relapse to Addiction using Machine Learning

Aug./'20 - Apr./'20

- Designing a machine learning model to predict the chance of drug relapse based on sequential data of drug addicts over the years.

### Detecting Cyberbullying on Twitter using machine learning

Using the twitter API and NLP techniques, building a machine learning model to determine tweets that are have cyberbullying traits

### Facial Emotion Detector

Jan./'20 - Present

- Designed and developed a face\_detection software using Open-CV and an open source facial recognition library.
- Developed a 6-layer CNN classifier model that classified images according to their emotional respective states.
- Tuned the hyper parameters to improve accuracy from 0.32 to 0.64.

## Activities

---

**Phi Kappa Psi** · *Scholarship Chair* | *Major Events Chair* | *Public Relations Chair*

**New Student Orientation** · *Orientation Leader*

**RIT Student Government** · *Facilities, Parking and Transportation Chair*

**Men Of Color Honor and Ambition 7th Cohort**

**National Society of Black Engineers**

**Robotics Club**

**Running Club**

**NeuroTechnology Exploration Team**

