Tampa, Florida Web:<u>link</u>

CHUKWUBUIKEM UME-UGWA

(813) 352-7214 Cume93@outlook.com

EMPLOYMENT

Institute for Computational Engineering and

Software Engineer, Intern

Sciences, U-Texas

Summer 2017

Phase Field Modeling

- · Created a parameter search algorithm for obtaining feasible simulation parameters.
- Created a parallel algorithm for data visualization and processing.

Undergraduate Research

University of South Florida

Summer 2016 – Spring 2017

- Optimized a MATLAB data collection program to enable faster data acquisition and reduced modeling time.
- Modeled rats' contrast sensitivity to characterize the effectiveness of glaucoma therapeutics.

EDUCATION

Tampa, FL University of South Florida

Fall 2014 – Dec 2017

- B.S. in Chemical Engineering, Dec 2017. GPA: 3.75.
- Undergraduate Coursework: Transport phenomena; Separations; Controls; Material and Energy balance; Programming Concepts; Instrument systems, Numerical methods.

TECHNICAL EXPERIENCE

Projects

- Carpool Friends (May 2017 present) A social networking application for managing carpools.
- Control System for an Industrial Digester (April May 2017). A feedback and feedforward control system designed to keep an industrial digester within environmental constraints.
- MyCarFinder (May 2016 Dec 2016) This application makes parking less of a hassle by saving parking location and routing to the location.
- Self-Heating natural bug repellent system (Feb April 2017).
 - A repellent dispersion system that uses an exothermic reaction to aid diffusion.
- Chemical Vapor Deposition reactor design (Oct Dec 2016) A chemical vapor deposition that has a yield of 75%.
- **Report analyzer** (Dec 2016 Feb 2017) An application that reduces the amount of time it takes to grade a lab report by doing a word count analysis on various report sections. C#;
- **Trading Journal** (Sep 2014 June 2015) A documentation app that enables the user whom is assumed to be a financial market speculator to document his/her daily transactions.

ADDITIONAL EXPERIENCE AND AWARDS

• Outstanding product design, Senior Design Projects: Awarded outstanding product design for Self-Heating natural bug repellent system.

AFFILIATIONS

- Tau Beta PI Engineering Honor Society
- American Institute of Chemical Engineers
 Institute of Electronic and Electrical Engineers

Languages and Technologies

- C++(basic knowledge); C(proficient); Python(proficient); Java(proficient);
 C#.NET(proficient); MATLAB(proficient).
- Visual Studio; Microsoft Office; Eclipse; Android Studio; Photoshop; AutoDesk Inventor; SIMULINK; Aspen Plus; Comsol Multiphysics;