Tampa, Florida Web:https://cleverchuk.github.io/

CHUKWUBUIKEM UME-UGWA

(813) 352-7214 Cume93@outlook.com

EMPLOYMENT

Institute for Computational

Summer Intern Engineering and Sciences, U-Texas

Summer 2017

Computational Simulation of Nanoparticle Sintering

- Used the first principles to develop a parameter search algorithm for obtaining feasible simulation parameters in C/C++.
- Developed a parallel algorithm for data visualization and processing in Python.

Undergraduate Research

University of South Florida

Summer 2016 – Spring 2017

Glaucoma Treatment

- 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: 3.75/4.0; Major: 3.67/4.0
- Undergraduate Coursework: Transport phenomena; Separations; Process Dynamics & Controls; Material and Energy balance; Programming Concepts; Instrument systems, Numerical methods; Product & Process Systems Engineering; Process & Product Design; Chemical Engineering Lab Iⅈ Reaction Engineering.

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 present). 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 theoretical 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.
- **Trading Journal** (Sep 2014 present). 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 Project: 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++(intermediate); (proficient);Python(proficient);Java(proficient);C#/.NET(proficient);MATLAB(proficient); front-end web technologies(intermediate).
- Visual Studio; Microsoft Office; Eclipse; Android Studio; Photoshop; AutoDesk Inventor; SIMULINK; Aspen Plus; Comsol Multiphysics;