

# James M. Copeland

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## EDUCATION

University of South Florida

Tampa, FL

**Bachelor of Science in Chemical Engineering**

May 2018

GPA: **4.0/4.0**

## WORK EXPERIENCE

*University of South Florida: Research Assistant*

Spring 2017 – Present

- Modeled a steel-tendon corrosion system in COMSOL under Dr. Timothy Fawcett to determine the effect of cathodic protection on structural supports in bridges
- Developed a 3D chloride diffusion model with COMSOL for Dr. Alberto Sagüés to confirm experimental results and investigate the effect of chloride ions on cathodic protection

*Publix Super Markets, Inc., FL: Customer Service Specialist*

May 2012 – Present

- Commended as a role-model employee by customer service managers for providing premier customer service and demonstrating leadership to fellow employees
- Trained employees on how to positively interact with customers and successfully complete job tasks

*Saint Petersburg, FL: Private Tutor*

2015 – 2017

- Instructed students about the problem-solving techniques and curricular knowledge necessary to succeed in their mathematics and chemistry classes

## RELEVANT EXPERIENCE

*Reactor Sizing Application*

Fall 2017

- Programmed a graphical-user-interface in MATLAB to allow users to determine the amount of catalyst required for a Hydrogen/Oxygen fuel cell application

*iFixit*

Spring 2016

- Managed a team that created a technical repair guide for the Motorola Moto G 3rd generation smartphone published through iFixit.com

*Thermo-solve*

Fall 2015

- Directed a class project that successfully developed a MATLAB program to solve certain thermodynamic-based, closed-system problems

## SKILLS

*Programming Languages and Applications*

- Proficient with MATLAB and COMSOL
- Experienced with Microsoft Office (Word, Excel, PowerPoint, and Visio) and Aspen
- Familiar with C++, Python, Java, HTML, CSS, and the Linux OS via a command line terminal

*Safety and Chemical Engineering Education (SChE) Certifications*

- Chemical Reactivity Hazards, Dust Explosion Control, Inherently Safer Design, Nitrogen's Role in Safety, Process Safety Lessons Taught from Experience, Risk Assessment, Runaway Reactions, and Safety in the Chemical Process Industries

## HONORS & AWARDS

- King O'Neal 4.0 Scholar from USF 2018
- Dean's List at the USF College of Engineering 2015 – 2017
- AIChE 2015-2016 Donald F. Othmer Sophomore Academic Excellence Award 2016
- William Rice Mathematics Award from Saint Petersburg College 2015