

Matei C. Jordache

32 Ridge Drive, Fleetwood PA, 19522 • 3104 Niagara Street, Pittsburgh PA, 15213
484.793.5274 • mateijordache.info • mateijordache@live.com

EDUCATION

University of Pittsburgh, Senior
Bachelor of Science in Chemical Engineering, April 2018
Cumulative GPA: 3.3 Term GPA: 3.3

WORK EXPERIENCE

Nanoelectronics and Ionics Laboratory, Summer Research Assistant (May 2017 - Aug 2017)
· Exploring and optimizing exfoliation techniques for few-layer 2D crystal flakes, characterization of 2D crystal flakes using AFM, creating journal quality images in Blender, and simulation of advanced memory devices using COMSOL Multiphysics.
Engineering Director, WPTS FM (May 2017 – Present)
· Ensuring functionality of station equipment, electronic diagnosis and repair, responsible for staff members, and antennae data collection for FCC compliance.
University of Pittsburgh at Bradford, Mathematics Tutor (Feb 2015-Apr 2016)
· Tutored mathematics from fundamentals through Calculus III, Advanced Differential Equations

SKILLS

Digital: Mathematica, MATLAB, Spartan, ASPEN, MS Office, AFM, COMSOL Multiphysics, Blender, Python
Physical: Optical microscope, Glovebox and hood, Soldering, Amateur electronics, Power/workshop tools

PROJECTS & RESEARCH

Nanoelectronics and Ionics Laboratory Research Assistant (Spring 2017- Present)
· Exfoliation, characterization and simulation of 2D, few-layer ‘flakes’ and devices for use in next generation memory applications.
Molecular Modeling in Blender (Summer 2017)
· Wrote a Python script for Blender that converts standard chemistry notations into objects readable by blender, retaining important information such as bond number and distance, atom size and ‘color’, and 3D geometry for use in journal quality renders.
Reactor Design Project (Spring 2017)
· Using MATLAB, a Carbon Looping Combustion (CLC) reactor was designed and simulated in MATLAB, to demonstrate effective decrease in harmful emissions from carbon-based power plants and alike facilities.
InMoov Prosthetic Arm, extracurricular (Spring 2016)
· Built and assembled PLA 3D printed hand and forearm. Controlled movement with a series of servo motors connected to an Arduino Uno.

LEADERSHIP

Engineering Director, WPTS FM (2017-2018)
· Managed and delegated staff of >20 students to maintain and improve station technology and infrastructure. On call 24/7 to respond to technical issues and emergency situations.
President of Gamers United, University of Pittsburgh (2015-2016)
· Organized many large scale events and tournaments for the campus during the year.
Treasurer of Engineering Club, University of Pittsburgh (2015-2016)
· Coordinated speakers, helped freshmen adjust to college and learn about co-op and transfer procedures.
Humans Versus Zombies, University of Pittsburgh (Fall 2015)
· Coordinated and successfully ran campus wide Nerf Gun Zombies event, estimated participation 200 students.

HONORS & INTERESTS

WPTS FM Engineering, Fall 2016-present
Dean’s List, Spring 2016
AIChE, Member, 2014 – present
Engineering Egg Drop Competition- 2nd Place, Fall 2014
Hobbies include: fixing/repair, cycling, eurogames, radio, and amateur electronics

REFERENCES

Dr. David Soriano, Organic Chemistry professor
Dr. Susan Fullerton, Transport Phenomena professor
Gregory Weston, WPTS FM General Manager

soriano@pitt.edu
fullerton@pitt.edu
grw8@pitt.edu