

Name Name

US Citizen • (123) 456-7890 • name.m.name@gmail.com • linkedin.com/in/namename/

EDUCATION

STATE TECH UNIVERSITY

Master of Science, *Molecular Science and Nanotechnology* | GPA: 3.70

CITY,ST

MAY 2020

Master of Science, *Electrical Engineering* | GPA: 3.70

MARCH 2020

Bachelor of Science, *Nanosystems Engineering*

MAY 2017

EXPERIENCE & RESEARCH

State NASA

SEPT 2018 - AUG 2019

Graduate Research Assistant

- Spearheaded manufacturing of various research samples in a class 100 cleanroom, particularly experienced in the fabrication and packaging of 10 μ m graphene ion-sensitive field-effect transistors
- Worked with multiple process steps of photolithography, mask patterning, E-beam evaporation, liftoff, plasma etching, wet etching, annealing, different deposition techniques, and post-processing
- Improved thin-film transfer process success rate on silicon substrates by 30% reducing R&D costs
- Experienced in the electrical, optical, and material characterizations of graphene coated with Au/Cr

UNIVERSITY MICROMANUFACTURING INSTITUTE (UMI)

SEPT 2017 - APRIL 2020

Graduate Research Assistant

- Managed scheduling, inventory, and process steps of metrology workstation where +100 GB worth of data was analyzed to fulfill collaborations with NASA, State Uni, Facility, and other UMI researchers
- Achieved AFM lithography with 20nm resolution by performing local oxidation nanolithography on self-made and class 100 cleanroom fabricated monolayered CVD graphene films and devices
- Integrated self-made improvements to facility's AFM to stimulate ongoing research, saving ~\$10,000

FACILITY FOR BIOMEDICAL & REHABILITATION RESEARCH

JUNE 2016 - MAY 2017

Undergraduate Research Assistant

- Led an interdisciplinary team to design a 3D printable preconcentrator for gas chromatography that combined nanomaterials and MEMS for gas sampling, miniaturizing the process by over 90%
- Developed and prototyped graphene infused polymer MEMS as part of a novel gas chromatography column, increasing the heat output by 33% through simulations to stimulate gas flow adsorption

PUBLICATIONS

- *First Author* | **Published** | Local Oxidation Nanolithography on some nanomaterials
- *Second Author* | **Under review** | Study on using gold nanoparticles to change growth of protein responsible for Parkinson's disease

PROJECTS

Optical Emission from Local Oxidation Nanolithography

- Planned and executed tests to see if atmospheric cold plasma was generated from local oxidation

Advanced Microfabrication and Microelectronics with CAD

- Simulated CMOS technologies such as etching, thermal oxidation, dopant diffusion, and ion implementation to simulate process flow for p-n junction diodes, NMOSFETs, and CMOS inverters

Analog CMOS Circuit Design

- Designed schematics and layouts for voltage refence, cascaded differential pair amplifiers, cascaded push-pull amplifiers, and various other analog CMOS integrated circuits

Feasibility of Mass Manufacturing of Graphene for Nanofabrication

- Worked on a team of 3 to develop and test a process to mass produce chemically exfoliated graphene