Mustafa Aslamy

Lake Hiawatha, NJ ⚫ 862-207-9656 ⚫ ma682@njit.edu

Education

New Jersey Institute of Technology

B.S. Mechanical Engineering, minor in Applied Mathematics — May 2019

Technical Skills

- **Python**
- **Linux**
- **C++**
- **Java**
- **HTML**
- **Matlab**
- **Creo Parametric**
- **SolidWorks**
- **ANSYS**
- **LAMMPS**
- **Ovito**
- **AutoCAD**

Employment Experience

Siemens Industry, Florham Park, NJ – Design Engineer — April 2020 – April 2022

- PLC Programming & Energy Analysis
  - Developed Database for all hardwired and virtual sensors and devices along with alarmable setpoints and safeties
- HVAC & Demand Flow Design
  - Designed control wiring schematics for electricians by applying knowledge of relays and ladder logic, as well as synthesizing team input, delegating workflow, and documenting alterations/resolutions
  - Produced final documentation for projects, which include all control systems and wiring schematics, all operation and maintenance manuals and any project specific required documentation
  - Applied specification and design requirements to select and procure appropriate motors, VFDs, starters and sensors

Advanced Solar Products, Flemington, NJ – PV Designer — October 2019 – April 2020

- Used AutoCAD software to design photovoltaic systems for residential, commercial, and utility purposes according to national and local codes
- Troubleshot problems involved with mounting panels such as rooftop obstructions, ordinance specifications, and azimuth angles

Sensor Scientific, Fairfield, NJ – Product Technician — January 2019 – May 2019

- Worked with CNC machine to manufacture thermal chips for use in heat sensing devices for medical, automotive, aerospace, industrial, and scientific applications

Research: Fuel Cells (LAMMPS software), Newark, NJ, Under Professor Dibakar Datta — June 2018 – September 2018

- Compiled software with Linux terminal to run multi-core processes for input and data files
- Used LAMMPS and Ovito software to run simulations of atom association with extensive and intensive properties, and how they are impacted by force and movement

Projects

NJIT Innovation Showcase, Reverse Engineering Project:

- Worked with a team of four to model a motorcycle carburetor on Creo Parametric
- Created 3-D assembly of individual carburetor components and generated animations

NJIT Drone Competition:

- Worked with a team of four to build and solder drone with hardware, drone frame, and motors
- Used Ardupilot software for GPS control of drone flight patterns

NJIT Research Showcase:

- Worked with a team of four to research and create airplane design to optimize flight for commercial airplanes
- Elaborated on design to optimize fuel efficiency and stability under turbulent condition

Activities and Professional Development

Aero Team - Math Analysis - Newark, NJ

- Applied fluid dynamics concepts to analyze plane components (lift, drag, stresses, etc.)
- Applied statics and dynamics principles to calculate lift and drag forces
- Used ANSYS software to perform fluid analysis on plane model

Solar Car Club- Newark, NJ

- Worked on mechanical aspects of competition car including brakes, suspension, and steering
- Used SolidWorks to create preliminary models of car components
- Used ANSYS Workbench to calculate stresses on car frame for further optimization