

## EDUCATION

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### University of Texas at Arlington

*BS, Mechanical Engineering*

**May, 2017**

*Arlington, TX*

- Engineering Student Council; Mission Arlington; MSA; Presidential Round Table; UTA Volunteers

### Engineer in Training (EIT) Certification – Texas Board of Professional Engineers

**March, 2018**

## ENGINEERING PROJECTS

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### ROVER Society – Texas Mars Rover Team

*President, 2016-2017*

**Sept. 2014 – June 2017**

*Arlington, TX*

- Led a robotics team to design and construct a planetary rover vehicle that was capable of traversing harsh terrains, servicing equipment, autonomous navigation, and able to collect soil samples for scientific analysis.
  - Competed in The Mars Society's University Rover Challenge in 2014, 2015, and 2017.
- Oversaw design direction, selected materials, reviewed analyses, approved engineering drawings and supported the construction, testing, and the operation of the rover for competition tasks.
- Generated CAD models and detailed engineering drawings for fabrication purposes.
  - Lowered cost and weight by simplifying designs and improving part manufacturability.
- Machined aluminum plates and components for the robotic arm, sample return, and suspension systems.
- Acquired sponsorship from Bell Helicopter, Elbit Systems of America, Line-X, Protocase, SolidWorks, etc.

*Vice President, 2015-2016*

- Managed team bill of materials, fundraising, outreach events, corporate and university sponsorships.
  - Raised over \$19,000 from the Mechanical Engineering Department, Student Congress, and UTARI.

*Sample Return Lead, 2014-2015*

- Delegated tasks to members for research in soil collection techniques and development of a compact system that collected 100 grams of soil, which was then tested on-site for signs of microbial life.

### Active Sun Tracking Solar-Powered Streetlights – UTARI

*CAD Design Lead*

**Aug. 2016 – May 2017**

*Arlington, TX*

- Fabricated and programmed an Arduino based device that accurately tracks the sun, fully charges the battery, keeps the streetlight on all night, and rotates the solar panel overnight to face the next sunrise.

### Unmanned Ground Vehicle System

*Mechanical Team Lead*

**Jan. 2017 – May 2017**

*Arlington, TX*

- Developed a 6WD vehicle that used real-time sensor data, dead reckoning, waypoint navigation, machine vision, Kalman filtering, and SLAM to navigate an obstacle course and reach its goal.

## WORK EXPERIENCE

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### NAMOO Korean Bowl Restaurant

*Kitchen Staff*

**Jan. 2017 – June 2017**

*Arlington, TX*

- Performed various tasks in the kitchen, preparing food and ingredients, operating and cleaning equipment, working on plate preparation, and maintaining cleanliness of kitchen areas.

## SKILLS & INTERESTS

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- **Skills:** Additive Manufacturing; ANSYS; AutoCAD; AutoLev; C++; Graphic Design; LabView; LaTeX; Machine Milling; MATLAB; PTC Creo; Python; Simulink; SolidWorks; Keynote / PPT; Video editing
- **Interests:** Meeting new people; fitness; traveling; camping; music; board & video games; Excel; Reddit