**OBJECTIVE**

Aerospace Engineer seeking career in spacecraft propulsion.

**EXPERIENCE**

**General Atomics,** Aerospace Engineer **2018-present**

Railgun

**Electric Propulsion Research,** *University of Illinois*, Research Assistant **2015-2017**

Fusor, Helicon, RF power, vacuum chamber, laser interferometry, plasma

**Manned Mars Mission**, *University of Illinois*, Team Lead/Structural Engineer **2016-2017**

Systems Engineering, spacecraft structures, AIAA design competition, trade studies

**EDUCATION**

**University of Illinois at Urbana-Champaign** **GPA: 4.00** **Current**

Master of Science, Aerospace Engineering

Electric propulsion, combustion, distributed and satellite control systems

**University of Illinois at Urbana-Champaign** **GPA: 3.97** **May 2017**

Bachelor of Science, Aerospace Engineering

Control systems, CFD, electric propulsion, systems engineering, UAVs, thermodynamics

**SKILLS & LANGUAGES**

* **MATLAB:** Image processing/analysis, Stereo vision, Simulink, Control systems, Model sizing
* **CAD:** SolidWorks, NX, Solid Edge, Inventor
* **Software:** Fluent, Excel, Mathematica, Comsol, Abaqus
* **Programming:** Python, C++, Fortran, Java, HTML, Javascript, MySQL
* **Other:** Linux, Windows, Git, Photoshop, Premier Pro

**WORK**

**Fusion Research,** *University of Illinois*, Research Assistant **2016-2017**

Tokamak, plasma deposition, circuits, plasma, vacuum, slow motion imaging

**Electric Propulsion Class,** *University of Illinois*, Teaching Assistant **2018**

Plasma physics, Hall thruster, ion thruster, resistojet, arcjet, pulsed plasma thruster, magneto plasma dynamic

**Empod,** Engineer and Business Associate **2013-2017**

CAD (SolidWorks), IMDS, 3D printing, Manufacturing, Windchill

**Autosplice,** Engineering Intern **Summer 2014**

Metallurgy, CAD (SolidEdge), electrical testing, cross sectioning, heat testing, IQMS

**Student Newspaper,** *Illinois Institute of Technology*, Business Manager **2013-2014**

FreshBooks, MS office, Adobe Illustrator

**EXPERIENCE**

**Electric Propulsion Research,** *University of Illinois*, Research Assistant **2015-2017**

Fusor, Helicon, RF power, vacuum chamber, laser interferometry, plasma

**Manned Mars Mission**, *University of Illinois*, Team Lead/Structural Engineer **2016-2017**

Systems Engineering, spacecraft structures, AIAA design competition, trade studies

**ACTIVITIES**

* **Boy Scouts** – Eagle Scout (2012), Order of the Arrow, National Youth Leadership Training
* **SAE** – Baja external chassis designer (2013-14)
* **Engineers Without Borders** (2013-14)
* **Ethics Bowl** (2011-14)

**PUBLICATIONS**

**Electric Propulsion Research,** *University of Illinois* **2017**

[arc.aiaa.org/doi/abs/10.2514/6.2017-4629](https://arc.aiaa.org/doi/abs/10.2514/6.2017-4629)

**Fusion Research,** *Princeton Plasma Physics Laboratory* **2016**

[nucleus.iaea.org/sites/fusionportal/Shared%20Documents/FEC%202016/fec2016-preprints/preprint0582.pdf](https://nucleus.iaea.org/sites/fusionportal/Shared%20Documents/FEC%202016/fec2016-preprints/preprint0582.pdf)