Andrew Woerpel

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| 920-988-5872 | andywoerpel@gmail.com |

PROFILE / OBJECTIVE

Highly motivated, hardworking, and technically diverse Engineer seeking the opportunity to work on educational robots with Lex Fridman.

EDUCATION

**University of Wisconsin - Platteville** Platteville, WI Graduation: December 2017

­College of Engineering, Mathematics, and Science

­Major: Electrical Engineering, Digital Electronics Emphasis, Control Systems Emphasis GPA: 3.86/4.00

Minor: Computer Science

WORK EXPERIENCE

**SpaceX** Hawthorne, CA / Boca Chica, TX Apr 2020 – Jun 2021

*Automation & Controls Engineer - Starship*

* Designed and built automation cells for the production of Starship launch vehicles. The various cells performed welding and cutting on the primary structures of the vehicles.
* Developed skills with Kuka robots, vision systems, robotic welding (plasma, MIG), robotic plasma cutting, servo motor systems, VFDs, sensors, pneumatics systems, PLCs, and more.

**SpaceX** Cape Canaveral, FL Jan 2018 – Apr 2020

*Launch Engineers – Data and Control Systems*

* Responsible for operational readiness of electrical and control systems at LC-39a and SLC-40 launch pads. Helped to launch 30+ rockets including 3 Falcon Heavy's and the first ever flight of Crew Dragon.
* Lead teams of technicians to perform launch pad upgrades and repairs. Notable upgrades include the systems that were necessary to launch SpaceX's first astronauts, Falcon-heavy specific support equipment, a PLC-based lightning warnings system, and numerous efficiency upgrades.
* Developed a web-based software application that significantly improved the speed and effectiveness of launch pad technicians/engineers.
* Designed and installed blast protection to help mitigate against the effects of rocket exhaust on the launch pads.

INTERNSHIP EXPERIENCE

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| **SpaceX** *Launch Intern*   * Helped build LC-39a * Supported 4 launches | **Rockwell Collins** *Software Intern*   * Developed maintenance software for the Boeing 777x | **ORBITEC** *Electrical Intern*   * Supported ISS greenhouse project. |

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| **Plexus** *Software Intern*   * Developed test software for a medical device | **Seljan Company** *Mech Intern*   * Designed production support equipment |

TECHNICAL / ENGINEERING SKILLS

* Experience with industrial robots (Kuka, ABB, Yaskawa), PLCs, servos, VFDs, vision systems, sensors, HMIs.
* Programming experience with Python, C/C++, web stack, MATLAB, Verilog
* Networking, Frontend/Backend (Angular & Django) web development, Amazon Web Services, Google Firebase
* Experience designing, building, and troubleshooting data acquisition circuitry and software
* Circuit/PCB design and construction
* Solid modeling skills in Solidworks, NX, Fusion360. Strong skills with sheet metal design packages
* Excellent with hands on tasks such as fabrication and troubleshooting

MEMBERSHIPS / AFFILIATIONS

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| * Eagle Scout, Boy Scouts of America | 2001 - 2012 |