Luke Jungmann

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EDUCATION

Master's of Science in Engineering, Robotics Engineering
University of Pennsylvania, Pennsylvania, PA, anticipated graduation May 2019

Bachelor's of Science, Mechanical Engineering
New Mexico Institute of Mining and Technology, Socorro, NM, graduated May 2017

TECHNICAL SKILLS

Languages & Software
- Python, Matlab, JavaScript, Angular, Cordova, SolidWorks, LabVIEW, C, Unity, Mathcad, Java, LaTeX, and the Microsoft Office Suite.

Machining
- Experience with machine shop tools including band saw, lathe, and mill.

Robotics
- Computer vision, machine learning, quadrotor control, robotic pathfinding and manipulation, and robotic hand and arm design.

RESEARCH AND EXPERIENCE

Software Developer   January 2018 to Present
Aerial Applications, of Robotic Services, Inc.
- Part of software development team focused on designing the frontend design and backend API of the Aerial Applications main app using Angular and NodeJS.
  - Angular's Material package was the primary focus for frontend design.
  - Backend development was accomplished with Typescript and Google's security API to maximize ease of use and overall security.

Research Assistant   Summers 2015 and 2016
Bioengineering and Biodefense Department, Sandia National Laboratories
- Assisted in the creation of a multi-spectral laser setup which was then manipulated using programs developed using MATLAB's GUIDE application.

Research Assistant   Fall 2016
Mechatronics Department, New Mexico Institute of Mining and Technology
- Performed research that directly benefited a design team working parallel-link manipulator for use with an aerial robotic platform.

PROJECTS

Design Team   Fall 2015 to Spring 2017
- Worked in large design clinic team to design and construct Blended Wing Body plane to compete in yearly SAE Aero West Competition.

Robotic Hand Design   Spring 2017
- Worked in small team to quickly design and implement functional robotic hand design, incorporating electrical, mechanical, and programming experience.

REFERENCES   David Grow, PhD, New Mexico Institute of Mining and Technology.
Phone: (575) 835-5109   Email: grow.david@gmail.com

Tie Wei, PhD, New Mexico Institute of Mining and Technology.
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