Luke Jungmann

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EDUCATION

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

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

TECHNICAL SKILLS

Robotics

- Computer vision, machine perception, machine learning, AI, deep learning, quadrotor control, robotic pathfinding and manipulation, robotic hand and arm design, and much more.

Languages & Software Experience

- *Proficient:* Python, SolidWorks, Matlab, JavaScript/Typescript, and Angular.
- *Beginner to Intermediate:* LabVIEW, C, Unity, Mathcad, and Java.

RESEARCH AND EXPERIENCE

Software Developer January 2018 to February 2019
Aerial Applications, 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, combined with HTML, SASS, and Typescript programming.

Research Assistant Summers 2015 and 2016
Sandia National Laboratories
Bioengineering and Biodefense Department

- 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
New Mexico Institute of Mining and Technology Mechatronics Department

- Performed research that directly benefited a design team working with a parallel-link manipulator for use with an aerial robotic platform.

PROJECTS

Mechanical Engineering Senior Design Team Fall 2015 to Spring 2017

- Worked in large design clinic team to design and construct a Blended Wing Body plane to compete in the yearly SAE Aero West Competition.

Product Design Teams Fall 2016 to Present

- Worked in small teams to implement knowledge and experience the teams have consolidated throughout their undergraduate and graduate careers to quickly design functional and visually appealing products, including a transformable cup, a parking kiosk, and a robotic hand.

REFERENCES

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

Nathan Sullivan, Robotics Services, Inc.
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Stephen Anthony, PhD, Sandia National Laboratories.
Phone: (217) 898-1581 Email: smantho@sandia.gov