

Alek Broman

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EXPERIENCE

F-16 Aerospace Propulsion Technician Air National Guard, 148th Fighter Wing

Aug 2016 – Present, Duluth, Minnesota

- Revised erroneous maintenance schematics by drawing on the expertise of top experts in the unit and forming technical conclusions for remediation based on the analysis.
- Overhauled personnel in-processing pipelines by independently discovering, researching, and eliminating redundancies, which accelerated personnel qualification throughout the unit.
- Effectively directed and streamlined a laser etching workflow of the aerospace propulsion maintenance activities to create an efficiency that reduced overall maintenance time.

EDUCATION

Bachelor of Science, Computer Science, Dean's List

Minor in Computer Engineering and Mathematics • University of Minnesota Duluth • 2021

Aerospace Propulsion Technical Training

United States Air Force • 2017

Basic Military Training

United States Air Force • 2017

SKILLS

Languages: C++, Java, Python, HTML, CSS, G-code

Frameworks: MJML, Selenium WebDriver

Software: Git, Fusion 360, Cura, Unreal Engine

AWARDS

Honor Award: Placed Top 5 of 1200 Trainees

Basic Military Training • 2017

“In recognition of remarkable performance in Basic Military Training. You led the way for those around you and set the example for every Airman in every squadron.”

Top Graduate of 200 Trainees, 323rd Training Squadron

Basic Military Training • 2017

“Your superior attitude, bearing, discipline, appearance, physical fitness, and academic performance epitomized our Air Force Core Values and set you apart from your peers.”

Most Outstanding Airmen of 50 Trainees, Flight 253

Basic Military Training • 2017

“You exemplify the ‘whole-person concept’ which set you apart, increased esprit de corps, and were critical to the success of your flight.”

Small Arms Expert Marksmanship Award

Basic Military Training • 2017

“For completing the weapons qualification course on the M16 rifle and achieving an above-average score, demonstrating patience and precision throughout.”

Thunderbolt Fitness Excellence Award

Basic Military Training • 2017

“For exceptional dedication to physical fitness and esprit de corps, laying the foundation for success in the United States Air Force.”

PROJECT

Sunsabers

2020 – 2021 • sunsabers.com // github.com/polymods

- Conceptualized and designed lightsaber components with Fusion 360 and Cura.
- Manufactured lightsaber components with PLA and FFF 3D printing technology.
- Used components to assemble advanced, movie-like, duel-ready lightsabers with CF-X microcontrollers and NeoPixel LEDs.