Brooks Mershon

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EDUCATION

DUKE UNIVERSITY
BS in Computer Science
May 2016 | Durham, NC
Cum. GPA: 3.74 / 4.0
Duke Cycling Team Member

NEW YORK UNIVERSITY
Writers in New York 2014

PENNSBURY HIGH SCHOOL
Valedictorian | Fairless Hills, PA

SKILLS

PROGRAMMING
TypeScript • JavaScript • D3
Git • Make
HTML • CSS • LaTeX
Familiar:
C++ • Python • Java • R • PostgreSQL
Emscripten

AVIATION
4034486CFIG
Commercial Pilot (ASEL, GLIDER)
Instrument (ASEL)
Flight Instructor (GLIDER)

Hours:
TOTAL: 955 • PIC: 860
DUAL RECEIVED: 210
ASEL (PIC): 487 • GLIDER (PIC): 368
CROSS COUNTRY (PIC): 158
NIGHT (PIC): 46
SIMULATED INSTRUMENT: 49
ACTUAL INSTRUMENT: 1
TAILWHEEL: 377
DUAL-GIVEN (GLIDER): 111
12-MONTHS: 498 • 90-DAYS: 93
VAN'S RV-6: 294
SCHWEIZER 2-32: 217
SKYBOLT: 20

Landings (PIC):
GLIDER: 822
ASEL 90-DAY: 141
TAILWHEEL 90-DAY: 107
VAN'S RV-6: 460
SCHWEIZER 2-32: 355
SKYBOLT: 102

Own/Maintain/Operate:
1993 RV-6 (SOLD)
1976 Skybolt (260hp, IO-540)
1974 C150L (1/3 Share)

EXPERIENCE

MILE HIGH GLIDING | Manager/Pilot
January 2019 - Present
- Experienced commercial glider pilot and tow pilot.
- Primary staff glider flight instructor.
- Rebranding and implementing new marketing for Mile High Gliding.
- Organized restoration of existing gliders and acquisition of new aircraft.
- Overhauled facilities and modernized booking and billing practices.
- Average 90-day currency: 200 tailwheel landings, 250 glider landings.

TRIMBLE SKETCHUP | Software Developer
July 2016 - January 2019 | Boulder, CO
- Worked on SketchUp running in the browser.
- 80 percent front-end work and 20 percent core geometry engine work.
- Won "Best Presentation" and "Best Overall Hack" at internal 2018 hackathon.

THE WASHINGTON POST | Graphics Intern
June 2015 - August 2015 | Washington, D.C.
- Designed graphics for print and online publication using Adobe Illustrator.
- Developed interactive graphics that were published online on subjects including baseball statistics, historical U.S. nuclear testing, and environmental conservation.

DUKE UNIVERSITY PRESS | Books Editorial Intern
Jan 2015 – May 2015 | Durham, NC

VERSAL | Software Engineering Intern
May 2013 – Aug 2013 | San Francisco, CA
- Developed simulations related to optics, epidemiology, image processing, and geometry as the company launched.

PROJECTS

INTERACTIVE EXAMPLES | Learning by teaching
Ongoing
bl.ocks.org and Observable Notebooks serve as a fun public place for me to share words and code, usually surrounding a subject that I am self-teaching. See website.

EQUIDECOMPOSING POLYGONS | Geometric Algorithm
March 2016 | Duke University
Decompose one shape into another shape of equal area.

3D SPECULAR REFLECTIONS | Interactive Simulation
February 2016 | Duke University
Implemented a visual and auditory echo simulator for 3D environments.

WIKIBLOCKS | Wikipedia and Visualization
Sept 2015 – Dec 2015 | Duke University
Developed a fully-functioning prototype Chrome extension and backend system that finds relevant visualizations for a STEM-related Wikipedia article.

TEACHING TOPOLOGY WITH CODE | Math + Code
Sept 2014 – Dec 2014 | Duke University
Built interactive pedagogical tools using D3 for a course in computational topology.