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

LINKS

Github:// **bmershon**
bl.ocks:// **bmershon**
LinkedIn:// **bmershon**
Twitter:// **@bgmershon**
Flickr:// **b_mershon**

COURSEWORK

Selected Favorites:
Euclidean and Non-Euclidean Geometry
Topology with Applications
GIS and Geospatial Analysis
Linear Optimization / Game Theory
Database Systems
Intellectual Property Law
Public Speaking
Digital 3D Geometry
Statistical Inference

SKILLS

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

AVIATION
Commercial Pilot (Glider)
Private Pilot (Airplane Single Engine Land)
Experience in:
Grob 103C Twin III • Cessna 152/172
Citabria • Super Decathlon • RV-6

EXPERIENCE

MILE HIGH GLIDING | Pilot
Starting July 2018
- Flying tourists over the Boulder foothills in a Schweizer SGS 2-32 glider.
- Developing new website and media for Mile High Gliding.

TRIMBLE SKETCHUP | Software Developer
July 2016 - Present | Boulder, CO
- Working on SketchUp running in the browser.
- 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 an automated pipeline using Makefiles for rendering a map from shapefiles and tabular data.
- Developed an interactive 3D globe for visualizing nuclear testing.

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

RV-6 (TAIL NUMBER N134JB) | Experimental Aircraft
May 2018 - Present | Longmont Municipal Airport
I own, pilot, and maintain an experimental category RV-6 named “Kismet” that regularly has me cruising just a smidgen under 200 miles per hour.

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.

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. Set up and benchmarked AWS server.

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