

BENJAMIN HALKOWSKI

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EDUCATION

COLLEGE of WILLIAM & MARY, Williamsburg, VA
Honors BS in Physics, Computer Science Minor
Deans List Scholar

August 2015 — May 2018
GPA: 3.7 / 4.0

UNIVERSITY of PITTSBURGH, Pittsburgh, PA
Phi Eta Sigma Honor Society
National Society of Collegiate Scholars

September 2014 — April 2015

EXPERIENCE

Technology Specialist
Fish & Richardson

October 2019 — Current

- Organize, draft, and prosecute patent applications for early-stage and fortune 500 clients.
- Lead invention disclosure interviews.
- Prepare and respond to office action communications from the United States Patent and Trademark Office.
- Plan, together with supervising attorneys, patent strategies including portfolio management.

Plasma Control Engineer
ASML

August 2018 — October 2019

- Building next generation etching tool for semiconductor manufacturing which involves a high power laser turning tin into plasma and directing the resulting light to reticle level for silicon exposure.
- Organized new features to improve plasma set up in system — 20% reduction in time, maintained quality.
- Developed entirely new algorithm to select best operating point for laser and subsequent plasma generation.
- Increased power of system by approximately 10% by taking advantage of asymmetric reaction.

Laser Design and Construction
Honors Research, William and Mary

June 2017 — May 2018

- Built laser from scratch (external cavity laser).
- Engineered various housings and control circuitry.

PROJECTS

PHYSICS

- Circuit Design / Construction
- LASER research
- Magnetic levitation (feed-forward)
- Franck-hertz Experiment

SKILLS

Electrical AND Mechanical Engineering
+ Theory

- Computer modeling of Solar System, projectile (ODEs)
- Magnetic levitation: program micro controller + full circuit construction
- Raspberry PI circuits

COMPUTER SCIENCE

- Full android app dev. x 2
- Advanced data structures/algos.
- Network security
- Personal webpage + GitHub

LANGUAGES

Java, Python, MATLAB, HTML, CSS, C++, LaTeX

ATHLETICS

- Nationally ranked soccer team.
- States qualified swimmer.
- Multiple team records.

ARTS

- Compose/perform + comedy.
- 15 years classical piano.
- Creative writing.

ExtraCurricular

- Chess/Sports Clubs
- FLAT HAT school newspaper
- SOCIETY of Physics Students