

Derek Goss

dcgoss14@gmail.com

derekgoss.com

(919) 923-0553

EDUCATION

Cornell University, College of Engineering • Ithaca, NY

Aug 2018 – May 2022 Expected

Bachelor of Science, Engineering Physics — 3.629 GPA, Dean's List

Harriton High School • Rosemont, PA

June 2018

International Baccalaureate Diploma — 4.98/5 GPA

EXPERIENCE

Cornell Racing (Formula SAE)

Ithaca, NY

Project Team Member

Oct 2018 – present

Contributes to designing, manufacturing, and racing an electric formula-style race car for official FSAE competitions.

- Joined the powertrain subteam for 2019-20 season
- Currently helping design the car's high performance electric battery pack (accumulator)
- Experience producing on-car components with CAD, machine shop equipment, and basic composites manufacturing

Virginia Tech Assistive Robotics Lab

Blacksburg, VA

Exoskeleton Design Intern

June – Aug 2019

Prototyped next-generation wearable exoskeletons for industrial and consumer lifting applications.

- Designed 14 proprietary innovations for essential exoskeleton mechanisms and components
- Synthesized technical sketches, CAD models, and physical prototypes into compelling system solutions
- Helped produce documentation and define product strategy for lab spinoff company Maroon Assistive Technologies

Synchro — synchrostopwatch.com

Haverford, PA

Founder and Developer

Aug 2017 – June 2018

Created an advanced stopwatch & logging app used in 10+ countries and by NCAA teams.

- Built full iOS app integrated with cloud analytics
- Launched on the Apple App Store in June 2018
- Featured on LetsRun.com

Project Cognoma — University of Pennsylvania Greene Lab

Philadelphia, PA

Project Manager and Software Engineering Intern

June – Aug 2017

Directed development and launch of Project Cognoma, a free online machine learning platform for cancer research.

The system analyzes correlations between gene-specific mutations and cancerous conditions.

- Designed and built user interfaces, cloud-based web services, and distributed machine learning data pipelines
- Orchestrated contributions from cancer biologists, data scientists, designers, and open source volunteers
- Delivered educational presentations on modern web deployment technologies at lab-hosted community meetups

Solar Energy at Harriton High School

Rosemont, PA

Author, IB Extended Essay

Sept 2016 – Feb 2018

Wrote a comprehensive report performing a cost-benefit analysis of installing solar panels on Harriton's roof.

- Integrated geospatial mapping, weather modeling tools, and personal interviews with Lower Merion Township officials
- Awarded the highest grade level from the International Baccalaureate Organization
- Paper kept by Harriton as an exemplar for future IB students

INVOLVEMENT

• Cornell Pi Kappa Alpha

2019 – present

• Cornell Triathlon Club

2018 – present

• Harriton HS Cross Country and Track Teams — Varsity Team Captain, 4-year letterman

2014 – 2018

Product Engineering, Project Management, Digital Development, Marketing & Design, Public Speaking