

Timothy R. Burchfield

COMPUTER SCIENCE STUDENT · NOTRE DAME

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Education

University of Notre Dame

NOTRE DAME, INDIANA

- Current GPA: 3.90

*Computer Science and
Cybersecurity Concentration*

Aug. 2016 - Exp. May 2019

Experience

Professor Douglas Thain

BASEKERNEL RESEARCH

- <https://github.com/dthain/basekernel> - Contributor for basekernel, an minimal kernel based on the idea of hierarchical containment.

Notre Dame, Indiana

Jan. 2018 - Present

South Bend Code School

FRONTEND WEB DEVELOPER

- Web Developer consulting with local companies through South Bend Code School.
- <https://portal.atlas3d.xyz> - Main developer on Vue.js single page app which interfaces with GraphQL database. Allows users to upload 3D models and optimize them for minimum build time, material consumption, or other factors.
- **Notre Dame Benefits page** - Assistant developer on internal pug html static site. Used to calculate benefits for prospective employees.

South Bend, Indiana

Aug. 2017 - Present

Fermilab

DATA ANALYSIS & VISUALIZATION INTERN

- Improved the data reduction pipeline for a new type of telescope camera.
- Automated various data visualization techniques in Python.
- Collaborated with a team of about 20 on the camera's data processing, error analysis modules, and documentation.

Batavia, Illinois

Jun. 2015 - Jul. 2015

Skills

LANGUAGES

- Python, C, C++, MATLAB, Verilog, JavaScript.

TOOLS

- Linux, Git, Bash, VueJS, GraphQL.

MISCELLANEOUS

- Systems programming, functional programming, multiprocessing, memory management, system calls, networking.
- Open source contribution - Borg (>2900 stars on github).

Extracurricular Activity

Linux User Group of Notre Dame

MEMBER & VICE PRESIDENT

- Organizes talks from members, faculty and guests.
- Plans projects and events.

Notre Dame, Indiana

Aug. 2016 - Present

Honors & Awards

UNIVERSITY OF NOTRE DAME

2016 -
Present **Suzanne and Walter Scott Scholars Program**, Awarded to students in the top 3% of the admitted class "who have demonstrated outstanding academic achievement [...] and who are committed to service in their communities".

2016 -
Present **Dean's List**, Top 30% GPA in College of Engineering.