

Timothy R. Burchfield

COMPUTER SCIENCE · NOTRE DAME

3043 Shenandoah Drive, Carpentersville IL, 60110

☎ (630)-258-9946 | ✉ tburchfi@nd.edu | 📷 TBurchfield | 🌐 tburchfield

Education

University of Notre Dame

NOTRE DAME, INDIANA

- Current GPA: 3.90

Computer Science

Aug. 2016 - Exp. May 2019

Experience

Basekernel

PROFESSOR DOUGLAS THAIN

- Contributor for basekernel, an minimal kernel based on the idea of hierarchical containment.
- Designed user-level shell, and implemented system calls.
- 📄 Basekernel

Notre Dame, Indiana

Jan. 2018 - Present

South Bend Code School

FRONTEND WEB DEVELOPER

- Web Developer consulting with local companies through South Bend Code School.
- Atlas3D - Main developer on Vue.js single page app which interfaces with GraphQL database.
- Notre Dame Benefits page - Assistant developer on internal Pug (formerly Jade) static site.

South Bend, Indiana

Aug. 2017 - Present

Fermilab

DATA ANALYSIS & VISUALIZATION INTERN

- Improved the data reduction and visualization pipeline for a new type of telescope camera 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++, Javascript, x86, MATLAB, Verilog, Scheme.

TOOLS & MISCELLANEOUS

- Linux, Git, Bash, L^AT_EX, HTML/CSS, Apache, Nginx, VueJS, GraphQL, Firebase, Pug/Jade.
- Systems programming, functional programming, multiprocessing.

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.

Projects

Manager	Cursello , Curses-based task tracking client.
Contributor	DevKit , Core code toolkit for software developers.
Contributor	BorgBackup , Deduplicating backup program. (>3000 stars on Github).
Team member	LanguageNet , Proof of concept neural network to teach machine learning.

📄 Cursello

📄 DevKit

📄 BorgBackup

📄 LanguageNet

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