**Ben Baker**

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Permanent Address: 5212 Manor Drive, Crestwood, KY, 40014

EDUCATION

**The University of Tennessee**, Knoxville, TN

Aug. 2022-Present

Bachelor of Science in Aerospace Engineering

**South Oldham High School**, Crestwood, KY

Mar. 2022

COLLEGE EXPERIENCE

**Boat Dimension Optimization MATLAB Script**

Mar. 2023-Apr. 2023

*Self-Started Additional Project –*

* Although not required by my engineering course (Honors Physics for Engineers), I made a MATLAB script to help my team find the optimal dimensions for a foam boat project, and continued iterating on it after the project’s completion
* I went through several iterations of the script, shortening the runtime by 7.5x over the course of the week

**Portable Electronic Toy Project**

Feb. 2023-Mar. 2023

*Team Member –*

* Was tasked with the engineering of the toy’s wiring, Arduino housing, lights, and sensors, and the Arduino C++ programming of the toy’s sensor functions
* Designed optimized housing for the circuitry, reducing empty space within to less than 40%

ACTIVITIES

**South Oldham High School Marching Band**

Jun. 2019-May 2020

*Pit Leader* –

* Led the band’s group of ten non-moving percussion during practices and performances
* Participated in section-leader meetings after practices and competitions

**Engineers of Tomorrow** (FIRST Robotics Competition [FRC] Team 2783)

Jun. 2020-Apr. 2022

*Systems Lead* –

* Led the sub-team tasked with the programming and wiring of our FRC robot
* Planned weekly systems training sessions for a year, teaching the necessary Java coding information and reference libraries
* Led our programming efforts (including autonomous navigation), writing most of the several thousand lines of Java code

**Student Space Technology Association**

Jan. 2024-Present

*Club Member*

COMPUTER SKILLS

Working knowledge of engineering software: Java, C++, AutoCAD, AutoDesk Inventor, MATLAB, Arduino IDE

Working knowledge of logistical software: Slack, GitHub, Microsoft Excel, PowerPoint, Word, Google Sheets, Docs

ADDITIONAL INFORMATION

Chancellor’s Honors

Aug. 2022-Present

UT Volunteer Scholarship Recipient

Aug. 2022-Present

Tennessee Scholars Recipient

Aug. 2022-Present

John L Chafin Scholarship

Aug. 2022-Present