

Andrew Zoghby

✉ azoghby@illinois.edu
🌐 <https://zoghby.net/>
🐙 <https://github.com/beeZow>

☎ (314)602-9083
🌐 www.linkedin.com/in/azoghby

🎓 Education

May 2022 **University of Illinois Urbana-Champaign** *BS in Computer Engineering.*
GPA: **3.88** / 4.0 | College of Engineering Dean's List

May 2018 **Parkway South High School.**
Summa Cum Laude

🧰 Work Experience

Caterpillar, Engineering Intern

- Programmed new engine display features using Java and HTML.
- Designed an emulation platform to provide analytic to legacy platforms.
- Analyzed memory chip failures to assess future risk and minimize it.
- Designed service routines to locate hard to detect, mechanical faults on engines.
- Integrated new requirements into existing control system specifications.
- Implemented control system specifications with Matlab Simulink.
- Built and Launched a collaborative calibration management database allowing calibration engineers to reuse past calibrations and distribute new features to relevant engines.
- Developed software tools to simplify interactions with the requirements database.
- Performed hardware in the loop (HIL) testing on pre-release software.

Offroad Illini - Baja SAE Team, Electrical and Drivetrain Subteam Member

- Redesigned gearbox shafts to be more reliable and durable.
- Assisted in manufacturing of suspension and drivetrain components.
- Designed and built a track timer utilizing an arduino and sensors such as a radar.
- Programmed a Java android app to interface with the timer via bluetooth.

First Tech Challenge Robotics Team, Captain and Lead Programmer

- Led team to two consecutive placements at the First World Championship.
- Planned and ran events at elementary schools about STEM education.
- Analyzed camera images using OpenCV.

👤 Skills

C, C++, x86 ASM, Java, Python, Matlab Simulink, Visual Basic, HTML, \LaTeX
git, Native Android Development, Linux System Development, Microsoft Excel Macros

📖 Relevant Courses

ECE 391 Computer Systems Engineering, ECE 486 Control Systems, CS 225 Data Structures, ECE 210 Analog Signals and Systems

🏆 Awards

UIUC College of Engineering Dean's List, HackIllinois Unanimous Grand Prize Winner, Uncommon Hacks First Place IOT Prize Winner, Eagle Scout, FIRST Dean's List Semi-Finalist