

# NICHOLAS BOGAN

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## SUMMARY

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Computer Science student specializing in systems programming and OS development. Experienced in low-level optimization, research, and teaching, with 5 semesters of TA work and an internship at Ecolab

## EDUCATION

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**Purdue University** 2022-2026  
Majoring in Computer Science CS GPA: 3.9  
Concentrations: Systems Programming, Programming Languages, and Machine Learning  
Pursuing a minor in General Management

## WORK EXPERIENCE

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**Digital Technology Intern**, Ecolab 2025  
-Built a POC dashboard that used Microsoft cloud services to monitor thousands of alarms  
-Collaborated cross functionally with UX designers to display real data  
-Presented the product to Ecolab VPs  
**Undergraduate Researcher**, Gustavo Rodriguez-Rivera 2024  
-Created an assembly profiler for detailed optimization of critical code  
-Won 2nd place at the Purdue CERIAS research conference poster competition  
-Profiler was used in the CS250 Computer Architecture class at Purdue  
**CS Lab Leader**, Purdue 2023 - Present  
-5 semesters including Computer Architecture and Systems Programming  
-Developed automated tools to notify TAs when students posted questions on the student forum  
-Created study material and exam guides for students

## PROJECTS

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**SunriseOS**, A functional toy OS with interrupts 2025  
**RISC Emulator**, a RISC CPU emulator and assembler programmed in C  
**Nyx**, Personal website programmed in ReactJS at bearly-codes.github.io 2023  
**Boiler Byte**, full stack nutrition tracker programmed with React, NodeJS and MongoDB 2023  
**TA-Alert**, Selenium based forum monitor, containerized with Docker 2023

## SKILLS

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**Programming Languages:** C, C++, Java, Python, R, Assembly  
**Web Development:** HTML, CSS, JavaScript, ReactJS, Node.js, MongoDB  
**Systems & Tools:** Linux/Unix, Git, QEMU, GCC Cross Compilers, GDB, Docker, Matlab, Azure  
**Certifications:** AWS Certified Cloud Practitioner (2023), IDEO: From Ideas to Action (2023)  
**Soft Skills:** Agile, Teaching, Public Speaking

## HONORS

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**Dean's List**, Purdue 2022, 2023, 2024, 2025  
**Member of Alpha Lambda Delta Phi Eta Sigma**, Purdue Honors Society 2022 - Present  
**Indiana Freemason's Scholarship**, Grand Lodge of Indiana 2022, 2023, 2024, 2025  
**Purdue Klinsky Scholar**, 21 credit hours earned in 5 weeks 2021