Youngjun Yoo

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EDUCATION

Purdue University

West Lafayette, IN

B.S. in Computer Science Honors | Software Engineering & Systems Software Track

Expected May 2026

- o GPA: 3.80/4.00 | Dean's List and Semester Honors (5/5 Semesters)
- Relevant Coursework: Operating Systems, Embedded Systems, Software Engineering I, Cloud Computing, Analysis of Algorithms, Data Structures & Algorithms, Systems Programming, Information Systems, Computer Architecture

WORK EXPERIENCE

Fasoo

Jun 2024 - Aug 2024

Software Engineering Intern | AI, Frontend

Seoul, South Korea

- Developed a real-time voice-to-note solution using **React** and **WebSockets**, integrating **STT** and **LLM** to process responses for **300+** daily users, reducing response time by **40%** through efficient **API** integration and React rendering
- Implemented a TTS platform using OpenAI TTS, enabling bi-directional voice communication with Claude 3 Haiku LLM, increasing user engagement by 65% through dynamic voice interaction and providing multilingual support
- o Implemented audio transcription and diarization with WhisperX, achieving 95% accuracy on 2-hour audio files

Purdue University Department of Computer Science

Jan 2024 - Present

Undergraduate Teaching Assistant | Systems Programming, Programming in C

West Lafayette, IN

- Guided 300+ students on core C concepts (memory management, pointers, structs) through a course Q&A forum
- Participated in QA for assignments for 700+ students, graded assignments, and led weekly labs with 30+ students
- Assisted 100+ students during office hours, providing debugging guidance, clarifying concepts, and addressing doubts
- \circ Conducted **code reviews** for **300-700** students, ensuring adherence to established ${f C}$ code standards for the course

Software Engineering Intern | Frontend

Jun 2023 – Aug 2023

Seoul, South Korea

- Engineered new features in the internal **TypeScript/React/Redux**-based project management system by building **reusable frontend components** for tracking project status, creating tasks, and updating the overall progress
- Developed a real-time **markdown renderer** with React, transitioning from manual formatting to **markdown-based documentation** with live preview, enhancing collaboration and boosting productivity by **40%** for **300+** employees

Fasoo

Fasoo

Jun 2021 - Aug 2021

Software Engineering Intern | Security, Backend

Seoul, South Korea

- Created a deliberately insecure Flask application to test Sparrow, a static/dynamic application security testing solution
- Augmented Sparrow's static application security testing (SAST) suite with new ground truths, mitigating 90% of obfuscated OWASP Top 10 security risks in Flask WebGoat, surpassing the detection capabilities of external tools
- o Implemented Flask logging, enabling real-time on-screen display of descrialization for insecure Linux commands

Projects

BoilerDate | JavaScript, React.js, Express.js, MongoDB Atlas, Material UI, Render, Netlify

Jan 2024 – Apr 2024

- Developed a full-stack dating web app for Purdue students, with swipe functionality, real-time chat, and filtering
- o Implemented premium features with advanced search criteria based on GPA, major, and educational background

BoilerPlate | TypeScript, React.js, Next.js, Tailwind CSS, Firebase, Vercel, OpenAI API

Jan 2024 – Feb 2024

- o Created a web app streamlining personalized, healthy meal selection across Purdue's diverse dining court options
- o Utilized OpenAI's Chat Completion API for tailored nutritional advice, enhancing users' meal selection experience

ORGANIZATIONS

Hack the Future | Team Lead

Sep 2024 - Present

- Team Lead at Hack the Future, the largest student organization at Purdue for creating software for nonprofits
- Leading a 10-person team to develop and deploy a revamped website for Rebuilding Together East Bay Network
- o Mentoring team in **React**, **Git**, and **design principles**, while leading weekly meetings and liaising with stakeholders

TECHNICAL SKILLS

Languages:

Python | JavaScript/TypeScript | C/C++ | Java | SQL | x86 Assembly | LATEX

Frameworks/Technologies: React | Express | Next | FastAPI | Flask | MongoDB | SQLite3 | MySQL | PostgreSQL |

SQLAlchemy | Jinja2 | Firebase | Render | Netlify | Vercel | Postman | AWS | Git