Christopher Yoeurng

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Education

- **California Polytechnic State University (3.95/4.00)** San Luis Obispo, CA
  B.S. in Computer Science - 3x Dean's List *Sep 2022 - Jun 2026*
  - Minors/Concentrations: Mathematics, Artificial Intelligence, and Machine Learning.

Skills

- **Languages:** C (proficient), Python (proficient), Java, JavaScript, TypeScript, Assembly.
- **Technologies:** React, AWS (CDK, APIGateway, DynamoDB, AppConfig, IAM, Lambda, S3), ML libraries (Tensorflow Keras, Scikit-learn, NumPy, Pandas, MatPlotLib, nltk), Java Server Pages (JSP), Version control, UNIX systems, RESTful APIs, Looker, Alexa
- **Relevant Coursework:** Object-Oriented Programming & Design, Digital Electronics, Systems Programming, Data Structures, Discrete Structures, Computer Organization, Software Engineering I & II, Vector Analysis.

Experience

- **Amazon** Seattle, WA
  Last Mile - Software Development Engineer Intern *Jun 2023 - Sep 2023*
  - Restructured feature deployment by migrating our largest service to AWS AppConfig and integrating a console for nontechnical users, saving >2hrs/week of developer time.
  - Developed the foundation for a client-side website exception detection model by refactoring and standardizing event and BI metric emissions. Driving $50k+/yr in reductions.
  - Created a "sanity test" script for developers in the org, automating the retrieval and interpretation of 8000+ line science model outputs. Integrated this test into an internal dashboard.
  - Implemented a plethora of new skills on Amazon Astro, an Alexa-enabled mobile robot, to assist with automated vehicle inspection, package anomaly detection, safety incidents, and more.
- **Actionable.co** Toronto, ON
  Recommendation Engines - Data Science Intern *Jun 2021 - Sep 2021*
  - Worked directly with the CEO and CTO on their Recommendation Engines team, which blends behavioral science with predictive modeling to give consultants suggestions on improving impact.
  - Designed a science model that used a neural network to study and regress the effect of consultant actions on corporate productivity across 14 metric planes, achieving >85% testing accuracy.
  - Architected a proprietary algorithm that uses the neural network I trained to simulate a series of possible consultant actions, returning the top 10 best actions in order of highest impact-to-effort ratio. Deployed using AWS Lambda.

Projects

- **Chatting Software:** Wrote a client-server chatting application in C using TCP Sockets. The program has a server mode and a client mode. Upon a user in server mode accepting a request, a new chatting instance is created, in which the server and client can send dynamically allocated messages across the socket streams.
- **MyTar**: Recreated Unix's tar from scratch in C. MyTar zips and extracts archive files, storing and restoring all metadata and contents, and checking for corrupted files. This can interoperate with tar.
- **Forest Game Refactoring and Redesign**: Refactored a large Java video game according to object-oriented design methodology. Implemented A* pathing, designed a UML diagram, and wrote unit tests using JUnit.

Awards

- **State Champion and National Qualifier in Industrial and Engineering Tech**: SkillsUSA CA
- **US DoS Sponsored Shanghai, China Study Abroad**: National Security Language Initiative
- **Darrien Special Award:** TKS International Artificial Intelligence Hackathon
- **1 of 10 recipients nationwide:** Carl N and Margaret Karcher Founders' Scholarship