

Christian Barrett

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EDUCATION

University of Southern California | *Bachelor of Science*

May 2023

- GPA: 3.79 / 4.00
- Major: Computer Science; Minor: Mathematical Finance
- Related Coursework: Data Structures; Algorithms; Software Development; iOS App Dev; Intro to AI; Computer Systems; Operating Systems; Computer Architecture; Functional Programming; Programming GUIs; Capstone: Design of Large Software Systems

Illinois Mathematics and Science Academy

June 2019

- GPA: 3.96 / 4.00

EXPERIENCE

Epic Systems | *Software Developer*

August 2023–Present

- Enabled 20 million monthly users to add, delete, and edit credit cards on their account by designing and implementing a new payment management page for MyChart, effectively reducing customer service call volume at hospitals and clinics by up to 50%
- Improved customer satisfaction by working with several customers on an optimal redesign for sharing access to billing accounts in MyChart, a highly requested feature
- Maintained high quality metrics of 80% on-track bug fixes by leading fix squad and bug triage meetings

Meta | *Software Engineering Intern*

May 2022–August 2022

- Increased engagement by 5% by implementing granular notification controls for Messenger stories
- Increased daily story posts by 5,000 by personalizing the Messenger “Add to Story” notification

Meta | *Software Engineering Intern*

May 2021–August 2021

- Serviced 10,000+ qps for advertisement attribution with newly created attribution framework
- Accurately predicted attributions of aggregated 95% of the time by launching new attribution rules

PROJECTS

AI Voice Assistant

March 2025

- Integrated Pipecat’s open source AI pipeline with Deepgram STT, Cartesia TTS, and OpenAI’s gpt-4o to create an end-to-end conversational voice agent
- Created an AI registrar designed to answer phone calls at a clinic and schedule patients for visits
- Implemented function calling to store patient responses to a database

Snake Game AI

May 2022–June 2022

- Built a custom neural network using Deep Q-Learning to play “Snake” by learning from 20,000+ games
- Improved neural network performance by 20% by deploying a breadth-first search algorithm
- Recreated the classic “Snake” UI in Javascript to visualize the performance of the neural network

Multi Agent Path Finding

November 2021

- Implemented a time-space A* algorithm to compute shortest paths for agents in a shared environment
- Ensured a complete and optimal solution by deploying a conflict-based search algorithm

SKILLS

- *Programming Languages:* Typescript, Javascript, C#, Python, C++, Java, SQL, Swift, ObjC, C, OCaml
- *Tools/Frameworks:* React, REST APIs, Pipecat, Livekit, Deepgram, Cartesia, FastAPI, NumPy, OpenCV, Firebase, Django, Git, SVN, Mercurial, Android Studio, XCode, Linux, VSCode, Visual Studio