

Caroline M. Abel

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Education

HARVARD UNIVERSITY

A.B. in Computer Science with Honors. Secondary in Economics.

May 2023

- Relevant Coursework: Systems Programming and Machine Organization, Data Structures and Algorithms, Intro to Theoretical CS, Discrete Mathematics, Abstraction and Design in Computation, Big Data

Technical Skills

Languages: Python, Scala, C, C++, Java, SQL, JavaScript, OCaml, HTML, CSS

Tools: GCP, Docker, Datadog, Terraform, PostgreSQL, Firebase, AWS, MongoDB

Work Experience

LAZARUS AI – AI systems to help people solve the world's toughest problems

Boston, MA

Software Engineer

August 2023-Present

- One of first engineers at venture-backed AI startup for enterprise clients in insurance, healthcare, and government.
- Reduced SaaS API latency by 90-95%, excluding model time. Identified and eliminated speed bottlenecks.
- Directly Responsible Individual for Container Products. Shipped document processing and multimodal reasoning AI solutions for on-prem environments.
- Co-led migration from monolith to microservices increasing developer velocity and service isolation.
- Implemented SaaS API versioning with load balancer to meet customer needs and increase stability.
- Mentored two intern projects into production.

SIMON MARKETS (Acquired by iCapital August 2022)

New York, NY

Backend Engineer Intern

June-August 2022

- Designed and implemented annuity allocation saving API from scratch using Scala, Akka, and ZIO.
- Collaborated with backend engineering team, UI/UX engineers, and Product Manager using agile methodology to quickly iterate and launch the feature into production.

LOVAGE LABS INC. – Smart virtual receptionists for local businesses

Lehi, UT

Full Stack Software Engineer

May 2021-February 2022

- First paid engineer at conversational AI startup backed by Y Combinator.
- Developed Python billing script from ground up to begin metered and unmetered automated customer billing using Stripe, FastAPI, and MongoDB Atlas.
- Created Python script to support phone provisioning for customers as part of new phone carrier support.
- Researched and integrated HashiCorp Products, AWS, and other DevOps technologies.

COVEDUCATION

Remote

Volunteer Web Developer

June-August 2020

- Contributed to new website to help K-12 education during the pandemic using React.js.

Projects, Research, and Teaching

SYSTEMS DESIGN INDEPENDENT STUDY

Cambridge, MA

Supervised by Professor James Waldo, Harvard University

August-December 2022

- Refactored and streamlined input verification system using Python for the AI for Social Good Lab PAWS Project, which supports a ML pipeline to identify high risk poaching areas and optimal park ranger patrol routes.

ARTIFICIAL INTELLIGENCE FOR SOCIAL GOOD LAB

Harvard University

Research Assistant

February 2021-January 2022

- Created a ML model to identify illegal wildlife markets in international trade networks.

TEACHING FELLOW CS50 (INTRODUCTION TO CS)

Harvard CS Department

- Led weekly section of 25 students, graded work, and advised final projects.
- Taught C, Python, SQL, JavaScript, and HTML/CSS.

September-December 2020

Interests

Girls Who Code, NJ Governor's School of Engineering and Technology, Girl Scouts, Crêpe Making.