

Alex Costea

Rochester, New York | alex@costea.in | linkedin.com/in/alexcostea- | github.com/Alex-Costea

EXPERIENCE

Research Engineer

July 2025 - Present

Metaculus, Full-time

United States (Remote)

- Lead the successful implementation of the Question Links feature, which allows users to input statistical connections between forecasts, automatically performs coherence checks and prompts users to update forecasts when necessary
- Engineered AI tooling for the automatic creation of Question Links, by performing statistical analysis on multi-step LLM pipelines to determine reliable connections between forecasts and submitting them using the Metaculus API

Software Engineer

July 2022 – Sep 2024

SAP, Full-time

Bucharest, Romania

Software Engineer

Apr 2024 – Sep 2024

- Lead the development of an internal hardware sourcing app, including various user roles and automated workflows based on business requirements, thus streamlining the tracking of resources and reducing costs significantly
- Developed an internal terminal tool to streamline the process of compiling, building and deploying Commerce Cloud instances using Python and Unix Shell, thus reducing developer time spent on manual terminal tasks

Junior Software Engineer

July 2022 – Mar 2024

- Lead the development of an AI assistant using RAG pipelines, developed with TypeScript and CSS in the front-end and Python and Flask in the back-end, which is estimated to reduce costs by 1.8 million dollars per year
- Implemented new features for a Commerce Cloud project using TypeScript, Angular and CSS, such as integrating HTTP services, creating components and handling localization for a 2 billion dollars per year revenue company
- Developed solutions for numerous Java, Spring and SQL back-end issues, as well as JavaScript, TypeScript, JQuery and Angular front-end issues, within SAP Commerce Cloud systems for multiple multi-national clients
- Provided mentorship to 4 co-workers in successfully passing the Oracle Certified Associate Java Exam, as well as in their integration within projects, thus contributing to their success within the company

EDUCATION

University of Amsterdam

Amsterdam, Netherlands

Bachelor of Science in Sociology. GPA: 7.75 (US equivalent: A)

September 2019 – August 2022

- Bachelor's Thesis: Centrality and Influence within COVID-19 Anti-vaccine Networks on Twitter

PROJECTS

Business Notifications for TechEngine Capital

April 2025 - June 2025

- Developed and deployed a full-stack React/Node app that scrapes business opportunities, notifies users of new postings and provides AI-generated overviews of the businesses, thus streamlining the acquisition process

Wiles (programming language, online code editor and interpreter)

August 2022 – Present

- Wrote the specifications for a programming language, supporting features such as conditional statements, loops, various data types, first-class functions, generics, sum types, hash maps, pattern matching and type inference
- Designed the software architecture to parse the input code into an Abstract Syntax Tree, to check the syntax tree for correctness and type safety, to infer unspecified type definitions and to interpret and execute the syntax tree
- Developed a Java and Spring Web based back-end for the online interpreter, which can receive REST API calls with Wiles code to execute and return the output, with support for concurrent calls
- Built and deployed a secure front-end which allows users to interact with the Wiles interpreter online as well as locally, including a syntax and error highlighter, developed using TypeScript, React, CSS and Vite
- Wrote extensive tests to thoroughly validate the application, achieving 90%+ test coverage for the interpreter

TECHNICAL SKILLS

Languages: TypeScript, Java (Oracle Certified Associate), Python, Kotlin, JavaScript, HTML, CSS, Shell, SPSS

Frameworks and Libraries: React, Angular, Django, Vite, Spring, Spring Boot, Flask, Node.js, Express, JQuery

Developer Tools: Git, Docker, Amazon Web Services, VS Code, IntelliJ, Apache Ant, Maven, Postman, Kubernetes

Technologies: Nginx, Caddy, JSON, SQL, Azure, AWS, REST APIs, HTTP, Regex, Ajax, Windows, Linux, Mac