CADE LUEKER

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SUMMARY

PhD student studying Programming Languages with a depth of knowledge in the NodeJS ecosystem, Rust, Python, and Fullstack web design.

EDUCATION

PhD, Computer Science, Programming Languages & Verification   Enrolled Fall 2024
University of Colorado Boulder, *CUPLV Lab*   3.94 GPA
Researching Verification and Abstract Interpretation. Mainly using functional languages such as Scala and Ocaml for implementations.
Relevant Coursework: Computer Aided Verification, Fundamental Concepts of Programming Languages

BA, Computer Science   Graduated May 2022
Case Western Reserve University, Cleveland, OH   3.81 GPA
Relevant coursework: Algorithms, Data Structures, Programming Languages

EXPERIENCE

Aarhus University, Denmark: Guest Researcher   May 2025 – July 2025

- Developing the effect-oriented programming language, **Flix**, in Professor Magnus Madsen's lab.
- Contributing to the Flix standard library, implementing OS and Networking libraries using effect-oriented and functional design patterns.
- Using the new JDK24 bytecode manipulation APIs to prototype a more robust **Scala** backend for the Flix compiler.

Unlimited Technologies Pte Ltd., Remote: Software Engineer   February 2024 – September 2024

- Working under the parent company of **Vertex Protocol** on their Quarry Mining Pool.
- Mainly tasked with writing and deploying new smart contracts, using **Solidity, NodeJS, Python, and Rust**.
- Using **Rust**, I created a local Ethereum runtime to test and build oracles to interact with on chain contracts.
- I created the front end application for the Quarry mining pool using **SvelteKit** and **PostgreSQL**.

Publicis Sapient, Denver, CO: Associate Software Engineer   August 2022 – November 2023

- Delivering production ready code for clients in the **Salesforce** ecosystem.
- Mainly Integrating **JavaScript** front ends with Apex back ends.
- Sped up average customer conflict resolution by 5 times for client with Salesforce CRM implementation.

Bluescape, Cleveland, OH: Test Automation Engineer Intern   March 2022 – July 2022

- Wrote, edited, and reviewed tests written with **Jest** for the production Bluescape **JavaScript** front end.
- Ensured test viability and compatibility via **GitHub Deployments**.
- Demonstrated comprehensive knowledge of best practices with respect to documentation and test design.

GXC, Seoul, KR: Mobile Development Intern   January 2021 – May 2021

- Tasked with proposing, designing, and implementing new features for the GXC mobile learning platform in the **Flutter** Framework.
- Worked extensively with server endpoints to build their **full-stack** application.
- Mentored by senior GXC staff and given research and development tasks for implementing text to speech in **Dart**.

TECHNICAL SKILLS

Web: JavaScript, Svelte, Tailwind, Bootstrap, Vue, Django, Flask
Programming: JavaScript, Rust, Python, Scala, Solidity, Ocaml
Certifications: Salesforce JavaScript Dev I