

Alex Bair

📍 Chapel Hill, NC ✉ alexbair143@gmail.com 🔗 alex-bair.com 🌐 alex-bair

👤 PROFILE

Senior software engineer with experience building and maintaining asynchronous programs, especially in Python, Golang, and Rust. I leverage my engineering and project management backgrounds to deconstruct complex problems and drive them to resolution. When I'm not at the computer, I bake (usually tasty) cookies and lift (not usually heavy) weights.

📁 EXPERIENCE

Software Engineer, Estuary [🔗](#) 2024 – Present

Responsible for real-time services processing terabytes of data daily for various source and destination systems.

- Developed and maintained new and existing integrations (Python, Golang).
- Improved feature set and reliability of connector development kit framework.
- Implemented control plane handling for OAuth2 refresh token rotation (Rust).

Creator, Software Engineer, Willow [🔗](#) 2024 – 2024

Willow (willow-cdc.github.io) [🔗](#) is an open-source framework for creating change data capture pipelines. It reflects database changes to a cache in near real-time.

- Designed and constructed a custom connector to transform events from Kafka and send to a cache (KafkaJS).
- Resolved Debezium configuration issues preventing multiple pipelines from connecting to the same database.
- Architected and implemented a RESTful API, facilitating pipeline creation and teardown (Express).
- Built pipeline management UI (React, Material UI).
- Authored comprehensive technical case study (willow-cdc.github.io/case-study [🔗](#)).

🧠 SKILLS

Backend

Python, Rust, Golang, Node.js,
Ruby, PostgreSQL, MongoDB,
RESTful and GraphQL APIs

Frontend

JavaScript (ES6+), TypeScript,
HTML, CSS, React, Jest,
Handlebars

Other

Change Data Capture, Git,
Docker, Linux, Bash, Apache
Kafka, Debezium, Nginx, OOP

🎓 EDUCATION

Rose-Hulman Institute of Technology 2013 – 2017

B.S. Chemical Engineering, *summa cum laude* GPA 3.98