

NAME

Alex Karle - platform and tooling engineer passionate about FOSS, security, privacy, and sustainability

SYNOPSIS

Proficient in: Python, JavaScript/TypeScript, Kotlin, Perl, SQL, Linux/*BSD, dbt, and man(1)
 Experience with: Go, C, Docker/k8s, PostgreSQL, ClickHouse, AWS, Terraform, HTML, CSS, and React
 Contact: alex@alexkarle.com
 Portfolio: <https://alexkarle.com>

WORK EXPERIENCE**Pocus.com, Remote**

2022-11 - Present

Software Engineer

- Overhauled the customer data ingestion pipeline using a mix of Temporal, Athena, and custom connectors for better reliability and observability
- Implemented a SQL-based DSL to improve app flexibility and performance
- Architected a persistent inbox model, enabling accurate reporting and attribution
- Codified complex internal dataset materialization using dbt, speeding up future edits by 5x, documenting the system, and adding the first tests on data quality

Studio.com, Remote

2022-09 - 2022-11

Lead Tooling and Infrastructure Engineer

- Designed and implemented a data structure and API for our curricula that reduced our bundle size by over 10% and enabled a custom CMS
- Aided the content team in ingesting 200+ curricula, saving weeks of labor

2021-10 - 2022-09

Senior Software Engineer

- Architected a new payments system to support subscriptions and easy auditing
- Led new-hire training, knowledge-sharing meetings, and interviews

2021-03 - 2021-10

Software Engineer

- Designed and implemented our first curriculum CMS, reducing both simple and urgent content updates from 15m of eng time to 2m of support time

MathWorks, Natick, MA

2018-09 - 2021-02

Software Engineer in Tooling

- Sped up local C++ builds by 2-3x through distributed compiler improvements
- Provisioned on-prem Linux servers and ensured testing machines provided accurate results through the development of custom healthcheck tooling

2018-07 - 2019-03

Associate Support Engineer

- Developed tools with the above team for half of my time
- Provided phone and email support for high-profile engineering customers for the other half of my time, coordinating complex cases with development

2017-05 - 2017-08

Software Engineering Intern (MATLAB Compiler)

- Enhanced detection and storage of .M file dependencies

University of Massachusetts Amherst, Amherst, MA

2018-01 - 2018-05

Machine Learning Research with Ben Marlin (Paid Position)

- Continued honors thesis development of an Active Learning labeling GUI

EDUCATION**University of Massachusetts Amherst (May 2018)**

- Dual Degrees in Computer Science (BS), Mathematics (BS), GPA: 4.0
- Commonwealth Honors College, Dean's Scholarship, John and Abigail Adams Scholarship