

NAME

Alex Karle - web, dev-tools, and infra engineer looking for open source and systems programming opportunities

SYNOPSIS

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

WORK EXPERIENCE**Studio.com (formerly Monthly.com), Remote**

2022-09 - Present

Lead Tooling and Infrastructure Engineer

- Revived our data lake and visualization tooling, using dbt to transform data from PostgreSQL and DynamoDB into a unified Snowflake database enabling the first accurate insights into the health of our student population
- Designed and implemented a data structure and API for our curricula that reduced our bundle size by over 10% and enabled a custom CMS
- Collaborated with content teams to ingest 200+ curricula from their editing suite of choice (Notion) into the new data model, saving weeks of manual labor

2021-10 - 2022-09

Senior Software Engineer

- Overhauled our fragile payments system into a robust service that could support subscriptions and reduced audit time from hours of custom scripting to minutes
- 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
- Added the first observability and alerting to our backend infrastructure, immediately identifying and fixing important errors that had existed for months

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, using model feedback to detect and suggest next best data to label in unlabeled video

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