

Joseph S. Burger

Omaha, Nebraska 68106

[LINKEDIN](#) • [GITHUB](#) • [PORTFOLIO](#) • [EMAIL](#)

Hi!

I'm *Joe*, a full stack software engineer who's into health and fitness, and enjoys collaborating to build end to end products.

SKILLS

Typescript, JavaScript, NodeJS, Kotlin, Python, Bash, C/C++, Java, PHP, Perl, Express, Vue, React, Ruby on Rails, HTML5, CSS3, SQL, Kotlin, Docker, AWS, Docker, Git, Linux, SQL, Redis

EXPERIENCE

Software Engineer at Airkit, Redwood City

03/2020 - 05/2023

- Lead engineer for cross-team cloud template service; planned & delegated work to multiple R&D teams
- Worked directly with CTO, management, product & design as SAAS project evolved over multiple quarters
- Developed a "CRON Service" using AWS Lambdas & Python allowing recurring cloud code execution
- Managed engineers and solutions architects to deliver critical SFTP, PDF and job scheduling features
- Coded a list-comprehension syntax feature into the in-house scripting language "Airsript" using ANTLR
- Utilized Microsoft's LSIF algorithm to add IDE features "rename" & "GOTO" to Airkit's WYSIWYG web IDE
- Trained interns; mentored juniors; onboarded new hires; contributed to team culture by facilitating talks

Software Engineer at Zume, Mountain View

01/2018 - 01/2020

- Doubled Zume Pizza's sales with a solo project, originating from me, implementing anonymous ordering
- Reduced customer support requests by >10% by utilizing UUID's to unify ordering across web and mobile
- Iterated, demoed & delivered products directly to stakeholders in rapid one-week sprint cycles
- Developed [zumepizza](#)'s SPA VueJS website, NodeJS Express RESTful API server and Postgresql database
- Broke monolithic API into Typescript microservices utilizing OpenAPI Swagger Docs to reduce complexity
- Responsible for training and onboarding new hires on Zume's agile processes and tech stack, bimonthly
- Created full stack projects for interns, including CI/CD; successfully managed & mentored interns

PROJECTS

KitCloud | Airkit (Kotlin, Typescript, React, Postgres, JOOQ, AWS S3)

Lead Engineer

A cross team, cross department, multi-year project allowing users to utilize templates

- Conceived and implemented all frontend & backend systems of this complex project over two years, integrating its own service with pre-existing Kotlin services, Postgres databases & AWS S3 storage
- Developed a serialization format on top of Airkit's graph-based copy-paste algorithm and established a dedicated backend service for the feature, aligning development with company release schedules.
- Delegated tasks to additional engineers across infrastructure, backend, and frontend departments

Refactoring Tools | Airkit (Typescript, React)

Added Rename & "GOTO: Reference/Declaration/Usages" to web-based IDE

- Produced the composite feature "refactoring tools" by combining a previous project for XML data structure hyperlinks with another project for adding foreign key relationships to Airkit's core data structure with yet another project to integrate Microsoft's LSIF algorithm into Airkit's web-based IDE
- Accelerated sales engineers and customers' development on Airkit's largest & most complex apps

Periodic Tasks | Airkit (Python, AWS Lambda, Typescript, React, Postgres)

A serverless arbitrary task scheduling and execution service

- Allowed customers to periodically transfer records via SFTP, run arbitrary code, or perform any action within Airkit's platform's capabilities, on any schedule supported by the Cronjob syntax

MES | Zume (Typescript, Vue, Express, Postgres)

Full Stack

A manufacturing execution system with machine station UX, chemical logs & audit capability

- Crafted a relational database system supporting industrial manufacturing machines configured in dynamic assembly line formations while maintaining support for mandatory chemical audits with titration support
- Flew to warehouse, interviewed hardware & chemical engineers, and designed GUIs for their stations

Vincenzo | Zume Pizza (Node, Vue, Express, Postgres, Redis, RabbitMQ)

A robotic arm which loaded freshly baked pizzas into mobile food storage containers

- Integrated kitchen API with Zume Pizza's monolithic API "ZAPI" and multiple GUIs to manage loading and tracking pizzas. If baking starts at 3 AM, debugging can too

Authless Ordering | Zume Pizza (Node, Postgres, Vue)

Allowed visitors of zumepizza.com to order & pay for food "anonymously"

- Capitalized on a previous project which added UUIDv4 identifiers to customers' orders to unify order tracking, to allow customers to skip creating accounts
- Doubled sales volume practically overnight

PRE-SWE EXP.

Head Instructor at App Academy, San Francisco

05/2016 - 12/2016

- Lectured and oversaw classes of 20+ students monthly; designed parts of the month-long curriculum
- Taught novices to code basic websites and algorithms in JavaScript, HTML, and CSS

Course Manager at App Academy, San Francisco

06/2016 - 01/2017

- Conducted 100+ technical interviews with instructor applicants

Tutor at Coder Dojo, Saratoga

04/2016 - 08/2016

- Delivered an interactive lecture teaching 40+ kids how to make websites with HTML and CSS

Teaching Assistant at De Anza College, Cupertino

09/2013 - 06/2015

- Volunteered to tutor computer science students and saved several from failing; gave lectures

EDUCATION

Studied Computer Science at De Anza College

2013 - 2015

BA in Philosophy at University of California, Santa Barbara

2007 - 2011

PERSONAL PROJ.

Interactive Resume (Langchain, Pinecone, AWS Lambda, React)

2023

[github](#)

A lightweight no-code webpage framework powered by MDX and an LLM

- Created a framework for generating a web page from a collection of mdx (markdown + JSX) files
- Utilizes Upstash (Redis), Cohere (large language model), Pinecone (document embedding vector database) and AWS Lambda to provide a knowledge base powered chatbot

Write it Up (Rails, ReactJS, Redux) | *Sole Developer*

2018

[github](#)

A responsive blogging website inspired by Medium.

- Quick single page app powered by React components injected with Redux global state store
- Relational database associations like comments, follows and likes simplified with Ruby on Rails' ORM, served as JSON through a RESTful API

EZPaint (Javascript, HTML5, Canvas) | *Sole Developer*

2018 [live](#) | [github](#)

A canvas-based painting site made in vanilla JavaScript.

- Uses JavaScript's touch API allowing users to draw both on desktop and on touch devices
- Adapts to phone, tablet and desktop screens using responsive CSS3 @media queries