



Software Engineer (Backend Heavy) | 10+ YOY | AWS Certified Developer

I'm a continuous learner with a voracious appetite for knowledge and ❤️ for TypeScript, the T3 Stack, Clean Code, DevOps, Developer Experience, Data Science, Woodworking, Skiing, and Vietnamese Coffee.

Recent Work

Lead Software Engineer *Leadrilla, Lexington, KY (Remote)*

Aug 2021 – Present

- Led a team of five engineers from Seed through Series A
- Took ownership of our backend, process, tooling, code quality, testing, deployments, site reliability, documentation, and training
- Re-architected our backend and built a new deployment pipeline, enabling us to transform our single instance web app into a multi-tenant enterprise SaaS app, resulting in **\$800k+ new Annual Recurring Revenue** and a new parent company ([SalesRiver](#))
- Collaborated with Product & Design to plan new features, ensuring that UI/UX could be developed as efficiently as possible
- Mentored engineers on frontend packages and best practices

Senior Manager, Business Analytics & Research *Alachua, FL (Remote)*

National Center for Construction Education and Research

Oct 2019 – Aug 2021

- Architected, deployed, migrated, monitored, and maintained the entire backend of a new [Single Sign-On service](#)
- Completely overhauled an antiquated database and reporting system, including a database cloud migration (MSSQL => RDS Aurora Postgres), ETL pipeline, drastically improved data schema, new GraphQL API, new CRUD web app, and dozens of reports.
- Developed real-time reports and conducted ad-hoc statistical analyses to produce actionable insights for executive leadership

Software Engineer *University of Colorado, Boulder, CO (Remote)*

Aug 2016 – May 2020

- Developed [an Artificial Neural Network](#) (ANN) and web app for the Colorado DOT, providing substantially more accurate and consistent estimates of construction durations than CDOT's existing methods, app is now used for all new projects throughout the state
- Developed [a web app](#) that applied the decision-making Delphi Method **50x faster** than traditional implementations, results published in a CII-funded research study ([Research Team DCC-01](#))
- Developed [an open-source web app](#) for analyzing and animating eye tracking data to study how construction craft workers read construction drawings, results published in 7 peer-reviewed papers

Civil Engineer *Dyer & Associates, Richmond, KY (Remote)*

May 2014 – Nov 2018

Software Skills

Languages & Frameworks

TypeScript, Node.js, Next.js, Remix, Express.js, t3-app, Meteor.js, Electron.js, Gatsby.js, SQL, PHP, Laravel, Dart, Flutter, Python, C++, R

CI/CD & DevOps

Git, Terraform, GitHub Actions, Travis CI, GitLab, Vercel, AWS Amplify, Docker, Docker Compose, AWS ECS, Jest, k6 load testing, CodeCov, Better Uptime, Logtail, Jira

Backend, Data, AI/ML

MongoDB, DynamoDB, Postgres, MSSQL, AWS Lambda, RDS, EC2, API Gateway, Glue, DMS, Athena, REST, RPC, GraphQL, Hasura, Keras, TensorFlow

Front-End, Design, Reporting

React.js, Tailwind, React Query, Docusaurus, Material UI, Figma, Sketch, Power BI, DAX, Retool, MetaBase

Education

PhD, Civil Engineering

University of Colorado
2016 – 2020 (3.9 GPA)

BS, Civil Engineering

University of Kentucky
2014 – 2016 (3.9 GPA)

BS, Construction Management

Eastern Kentucky University
2008 – 2012 (3.8 GPA)