

Cole Reid

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Fullstack software engineer with 19+ years experience leading product-focused engineering teams in building mission-critical applications and cloud infrastructure that exceed business expectations.

Experience

Sabbatical / Recurse Centre Participant **Jul 2024 – Present**

- Built a sports analytics and data platform to enhance race review and storytelling in professional cycling using Go, Docker, React, TypeScript, Temporal and MinIO
- Conducted spatial and cluster dynamics analysis experiments using pro cycling GPS data in Jupyter Notebook/Python

Polymon.cloud, Founding Engineer (1 day/week) **Jan 2023 – Jul 2024**

- Architected core infrastructure deployed to AWS using CDK, IAM, Cognito, Lambda, S3, Kinesis, Cloudfront and SES
- Led research and selection of MQTT gateway hardware capable of running in remote, hostile environment
- Developed power observability and monitoring platform UI features using React, TypeScript and React Query
- Constructed data pipelines to ingest IoT data using Typescript, AWS IoT Core, IAM, Kinesis, SQS and Lambda processing >1m data points daily

Nutrien, Lead Frontend Developer (4 days/week) **May 2022 – Jul 2024**

Cloud Modernization/Replatforming Project

- Led team of 3 developers building plant operations applications in React, Typescript, React Query and Material UI
- Deployed frontend infrastructure for five applications to AWS using CircleCI, CDK and Typescript, S3 and Cloudfront
- Implemented monorepo and CI/CD pipeline enabling automated deployments reducing maintenance overhead >50%
- Contributed as member of organization-wide architecture committee to standardize APM tooling and best practices

Freelance, Architect/Software Developer **Sep 2021 – May 2022**

- Developed HMI interface in JavaScript for an industrial automation client increasing data refresh rate 30%
- Built COVID test tracking application for healthcare client in React, Typescript, React Query, Node.js mongodb, AWS
- Conducted code review for IoT agriculture startup, identifying security vulnerabilities & missing best practices

Nutrien, Lead Frontend Developer

Electronic Work Permitting Application Project

Jan 2020 – Sep 2021

- Developed e-Permitting application in React, Redux and Material UI enabling digitizing of >1000 work permits weekly
- Built and led new team, hiring 6 developers to perform long term support and maintenance of 5 applications
- Optimized OpenSearch query performance and improved search queries by >200%
- Deployed CI/CI pipeline using CircleCI to test and deploy infrastructure and application to AWS using CDK, TypeScript

Testfire Labs, Senior Software Developer **Jun 2018 – Dec 2019**

- Led team of two frontend developers building AI meeting assistant in React, TypeScript, Redux and Node.js
- Developed calendar synchronization (Office 365, Google Calendar) backend features in Node.js and PostgreSQL
- Built mobile app using React Native and Expo implementing computer vision model to assess cannabis plant health

Pre 2018 experience available on request

Skills

Frontend: TypeScript, React, React Native, React Query, Zustand, HTML/CSS, Tailwind, AG Grid, Leaflet

Backend: Node.js, Koa, Express, Go, Python, PostgreSQL, MongoDB, InfluxDB, DynamoDB, Redis, ElasticSearch

Devops: AWS (CDK, IAM, Cognito, Kinesis, Lambda, S3, IoT Core, Cloudwatch, SES, SNS, SQS), CircleCI, Sentry, Grafana

Education

NMIT Melbourne – Certificate IV Internetnetworking

Dec 2005