Ng Guoyou

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KEYWORDS	Work experience with TypeScript, Rust, Python, JavaScript, Node.js, Ruby, HTML, CSS, Docker, React, Redux, Webpack, Photoshop, Illustrator, Agile, user testing

EXPERIENCE

BASIS AI (BASIS TECHNOLOGIES PTE. LTD.)
Software Engineer, Singapore, 2019–Present
TypeScript, Python, Rust, Webpack, React, Redux, Docker, Kubernetes, UX
Employee #3 and engineer on Bedrock, a machine-learning platform for training and deployment. Bootstrapped frontend with Webpack, TypeScript, React+Redux and implemented large parts of it, including charts and network visualisations. Created reusable React component library. Built performant client workload monitor in async Rust; includes streaming ZIP and large file uploads. Created pagination on REST queries for Python/SQLAlchemy. Implemented Docker image caching for fast workloads using kaniko. Implemented company website basis-ai.com in Next.js. Set up agile environment and processes. Pushed for and conducted UX user testing as needed.

GOVTECH (GOVERNMENT TECHNOLOGY AGENCY)
Software Engineer, Singapore, 2016–2019
www.mycareersfuture.sg, job portal
2018. Node, TypeScript, JavaScript, React, Redux
Implemented frontend features for MyCareersFuture. Orchestrated transition to TypeScript across the team. Started greenfield employer module with TypeScript.

opencerts.io, academic qualification verifier
2018. Ethereum, Parity, Solidity, JavaScript, TypeScript, React, Redux
Created tools to bulk-register academic transcripts on Ethereum and interact with smart contracts in Node, TypeScript and React.

Data ingestion validator, API endpoint, and data visualisation application
2017. Rust, Python, Flask, JavaScript, React, Redux
Optimised data ingestion time by 50× over Python implementation using Rust. Developed front-end application for geographic data from scratch with IE11 support.

www.businessgrants.gov.sg, grant application and tracking portal
2016. Ruby on Rails, React, Redux
Implemented features for and fixed bugs on forms with complex validation logic. Integrated with SAML. Introduced linting for Ruby and JavaScript on large codebase.

EDUCATION

Bachelor of Computing (Communications & Media) Hons.
National University of Singapore, 2011–2015
UX, HCI, and computer graphics focus

PERSONAL

Singapore citizen. Native English and Mandarin Chinese speaker.
- Toy audio synthesizer library in Rust with MIDI support and WebAssembly interface
- Parallel raytracer with basic animations in Rust
- Retro image filtering application in React and Redux
- Browser extension for organising downloads with ≈3000 users
- Sharing sessions and presentations from work