# Jon Seppanen

#### **HEAD OF ENGINEERING**

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I'm Jon, and I love building things. Things like Great Software, Tight Teams, Amazing Products, and even a bit of metalworking when I get the chance. I'm all about UX-first, with heavy experience in back-end, front-end, middle-end, middle-out and infrastructure who likes to make pretty things that go fast. My passion is to help startups turn their vision into reality in the most efficient and economic ways possible. I make sure to keep myself and my team razor sharp with the latest tech and love getting hands on with code. I use tried and true techniques to keep maintainability high in my code bases and I love good documentation. I have extensive experience in hyper-scale, big data, deployment, analytics and automation. Most of all, I believe that culture fit is the most important part of any team. Hopefully I fit yours!

#### **EXPERIENCE**

#### Technical Lead at Annalise.ai

Remote, NSW • Sep 2022 - Present

Take ownership for the delivery of a new green fields product, from architecture to delivery. In addition, lead a massive API refactoring initiative to unify business logic for medical requirements.

- Extensive team leadership, mentoring and training
- Stakeholder liaising for translation of business requirements to features and code
- Software architecture and design for multiple products and initiatives
- Sweeping re architecture of unit testing methodology and structure
- · Work with principle engineers to design an entire refactoring/v2 of the overall product

## Head of Engineering (Software) at Assetlogue

Gold Coast, QLD • Jul 2018 - Sep 2022

Take ownership of the software development process and relaunch of the namesake app (Assetlogue).

- Team Leadership and Talent Acquisition, including the remote teams in Georgia and Sao Paulo
- Extensive experimentation and research of big data processing and analytics methods
- Lead the architecture and development of back-end, middle-end and front-end systems
- Design and manage infrastructure and deployment pipeline for the live app
- Manage enterprise back-up solutions and compliance for sensitive customer data

## Lead Developer/Solutions Consultant at iStyle Studio

Brisbane, QLD • Dec 2015 - Jul 2018

Consult with startups and small business to develop their engineering tool-chains and workflows as well as help develop their MVP's, including research, design and development.

- Develop custom apps for various clients with a strong focus on integrated analytics
- Manage customer relationships and accounts wherever needed
- · Manage a diverse and remote team for completion of multiple projects at once

National Infrastructure Manager/Dev Ops at Australian Institute of ManagementBrisbane, QLD • Dec 2012 - Dec 2015

Manage the IT support and LMS software teams, as well as management of a large Microsoft Active Directory deployment and AWS server infrastructure.

- Install and Integrate the LMS software system for AIM
- Manage and restructure the IT support team for 300+ staff
- Restructure and develop enterprise grade backup for massive amounts of data
- Lead the IT unification and merger of six different state branches into one

## **Consulting Solutions Architect**

Darwin/Launceston/Melbourne/Brisbane, AU • Dec 2007 - Nov 2012

This role was extremely varied, and I learned a lot. I consulted for hundreds of clients over the years and implemented multiple unique solutions in many different environments, from small two man shops to private day hospitals with hundreds of staff. I frequently brought in various specialized staff for each project and kept a close network of great people on hand.

- Built the first virtualized datacentre in Darwin, for online betting companies AK Racing, overTheOdds, and BestOddsBet
- Consulted with Bluechip/HCN on their Medical Director software to help them meet government reporting requirements for private hospitals
- Deploy the first web-3d x-ray system for private dental surgeries in Australia

## **PROJECTS**

**Endeavour OS - Elementary Edition** I am one of the founders of the (still in final testing) Elementary OS version of the popular linux distribution Endeavour OS. This involves a lot of kernel and window manager patching, scripting automation and testing/deployment.

**LinkedState for React** I am the creator of the LinkedState npm module for React JS, which allows any hook to "link" with any or multiple other hooks with a shared key, and all update/change in concert within and outside of react.

**Hypertile** This is a unique piece of software that allows the display of billions of real-time updated objects on a map in a web browser, while using less than 50MB RAM on the respective clients. This was specially created to allow older phones and tablets to view vast amounts of 3d data in real time without performance impact.

**Lolth (working title)** This project is designed to allow for a cascading permission structure on a "route tree" for a node backe-end, connecting to a database. This allows all routes to be a large JSON object with inheritable permissions and various other actions, with automatic websocket real time updates, and wild card support in the routes. I built this project to support the extraction of hundreds of thousands of records from mongo DB within 100ms on an AWS free tier node, whilst still having permissions checking on all of them.

**Authenticator (working title)** This is a startup side project built as a total drop-in replacement for Auth0, after concerns by the community over it's recent aquisition by ookla. This is currently feature complete and in internal use at Assetlogue.

### **SKILLS**

Languages and Frameworks Vanilla Javascript, React, Node, Deno, PHP, Laravel, Rust, Electron, NW.js, Bash, Batch, Lua, Python, Slim, Express, Mapbox GL, Geojson, GIS, Typescript

Infrastructure AWS, Azure, Linode, Linux, Xen/KVM/etc, SSH, SCP, Docker, Kubernetes, Podman, Docker-compose

Database SQL, Postgres, MongoDB, SQLite, Flat File, RDS, S3

Networking Traefik, Apache, Nginx, Caddy, Route56

Authentication Open Auth/Oauth2, PKCE, Social Login, Encryption, Auth0

Specialty Skills Hyper-scale, Big Data, Al, Automation, Deployment