

Josh Reuben

AI Tech Lead / Software Architect / Hands-On CTO

20+ years Experience: 1) AI, 2) CloudOps 3) Webdev Fullstack, 4) Software Architecture R&D + Team Lead. Software Engineering capabilities in multiple languages inc Rust.

Personal Details

Citizenship: Australian / Israeli LinkedIn: www.linkedin.com/in/joshua-reuben-3798544/
Family Status: Married + 3 children Twitter: [@JReuben1](https://twitter.com/JReuben1) <https://twitter.com/JReuben1>
Address: Ness Ziona Github: github.com/jreuben11
English – excellent; Hebrew – intermediate Blog: gists.github.com/jreuben11
Phone: 0546160639 E-mail: jreuben111@gmail.com

Master of Science Bioinformatics (Uni. Manchester: Thesis - "Design Patterns for Systems Biology")

Graduate Diploma in Biotechnology (Uni. New England)

Bachelor of Computer Science (Uni. Technology, Sydney – Hons.)

Certificates: **MVP** (Technical Computing 2011-2013), **MCSD**, **MCSE**, **CNE**

Courses: HuggingFace, Certified Ethical Hacker, Numerical Methods, Google Cloud ML, DeepMind RL

Interests: Fitness, family, education, reading, AI, computation / mathematics, Rust

Work Experience

2021 – current AI Architects + MLOps Teams Leader Cognyte (AI Fusion-Analytics)

- Chief AI Architect: Research, Designs + oversight of ML Pipeline infrastructure
- Group Leadership: of 4 distributed teams + outsource mgmt, sprint planning, mentoring & training
- Strategic Planning & Research: owner of tech innovation roadmap
- Tech Leadership: Cloud-Native + CI/CD, ProdSec, Data Streaming, WebDev FullStack, Machine Learning

2018 – 2020 AI Architect / Dev Team Leader Kami Computing (E2E GPT chat + emotions)

- Leadership of 2 teams – envisioning, planning, mentoring
- Deep Learning Model R&D – NLP LLMs, STT/TTS, Dialog RL
- Tech Lead: containerized MicroServices, DevOps, GitOps, CloudOps

2016 – 2018 Data Science and Engineering Architect Apester (AdTech)

- AI Platform R&D – Python NLP, Google Cloud, Graph data, WebDev FullStack

2015 – 2016 Software Architect / Dev Team Leader Grymco (AdTech Startup)

- Architecture Design, Dev Team Management & Programming: Cloud-Based, Reactive Systems (Scala Ecosystem)

2013 – 2014 Senior Software Engineer 888

- Architecture Design + Software Engineering of Game Servers (Modern C++)

2010 – 2012 Cofounder, Architect/Programming Consultant CodeValue

- C# .NET - clients: HighCon, Landa Labs, Nova, XTR3D, Cellebrite, Microsoft, Ness, B-Nano, eToro, ForexManage, Meerkat

2007 – 2010 Architect Consultant / Trainer Sela

- Java Hadoop, WebDev - clients: Amdocs, Elbit, Matach, Malam, InnovaShare, Elal, NDS, Logic

2004 - 2007 Software Engineer 4DM-Technologies

- Design & develop Command and Control + 3D GIS system for crisis mgmt

2002 – 2004 Bioinformatics Australian Proteome Analysis Facility (lab)

- **Algorithm R&D** - for 3D-QSAR, Systems Biology, Cheminformatics HPC

1998 – 2001 Software Engineer Fujitsu Australia

Skills

Leadership: Team management, planning, mentoring & training, code-review, remote outsource coordination

Artificial Intelligence:

- **Deep Learning:** Transformers, Reinforcement Learning, Graph Neural Nets, Math foundations, MLOps pipelines
- **SDKs:** JAX, TensorFlow, HuggingFace, LangChain, KubeFlow, Numpy/Scipy, Dask, RAPIDS, Ray, RLLib, Milvus (VectorDB), Pandas, NetworkX, Matplotlib, FastAPI, SQLAlchemy, Poetry, PyEnv
- **GOFAI Algorithms:** Search, Planning, Probabilistic Logic, Semantic MediaWiki / SparQL, Numerical Methods, Spacy NLP, SKLearn ML
- **Misc:** AGI + Philosophy, Cognitive Psychology, Program Synthesis, Protein Structural Bioinformatics

Currently self-learning: (besides AI)

- **Rust (intermediate level):** WASM, PyO3, Tokio, CXX, Algorithms, Macros
- **CUDA + NVidia SDKs**
- **Compilers:** LLVM, MLIR, OpenXLA
- **3D:** Vulkan, Blender API
- **Internals:** Linux, VSCode, Jupyter, CPython

Infrastructure Architecture Design / Hands-on: K8s CNCF ecosystem, Github + Actions, Linux, Google Cloud (BigQuery, DataFlow, GKE, VertexAI), Docker, Trino, Neo4J, PostgreSQL, Redis, gRPC, Streaming, Apollo GraphQL

Secondary Skills:

- TypeScript WebDev FullStack: React, Redux, NextJs, Deno, CSS, WebPack
- Modern C++: CMake, HPC {MPI, OpenMP}, JNI + NDK, Qt, JVM proj Panama, CPython
- Scala + Akka distributed systems
- Algorithms, Bash

Data Visualization: WebGL / ThreeJs, SVG, Metabase, Dash / Plotly