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

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| --- | --- |
| Citizenship: Australian / Israeli | LinkedIn: www.linkedin.com/in/joshua-reuben-3798544/ |
| Family Status: Married + 3 children | Twitter: [@Jreuben1](https://twitter.com/" \l "!/JReuben1) <https://twitter.com/JReuben1> |
| Address: Ness Ziona | Github: [github.com/jreuben11](https://github.com/jreuben11) |
| English – excellent; Hebrew – intermediate | Blog: gists.github.com/jreuben11 |
| Phone: **0546160639** | E-mail: [jreuben111@gmail.com](mailto: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, Py03, 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, PostgresSQL, 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