

Jason Hutchens

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PROFILE	Staff engineer, technical leader and AI researcher with three decades of experience, from building award-winning language models in the 1990s to developing LLM-powered systems today. Seeking to work remotely from Perth, Australia on challenging and fun projects where I can make a measurable improvement to product quality. Passionate about developer experience, constantly looking to optimise team productivity through better tooling and processes.
NOTABLE ACHIEVEMENTS	A selection of career highlights spanning AI research, game development and enterprise software. • Won the Loebner AI Prize in 1996 for best conversational AI. • Led an AI project that was featured in New Scientist, Wired and the NYT. • Designed AI systems for <i>L.A. Noire</i> at Team Bondi. • Led development and R&D at a technology company that was later acquired for \$100M. • Built core systems powering asset finance for a major client across three countries.
SKILLS	Project management, system architecture, remote team leadership, developer experience, AI/ML, technical writing, web development, DevOps, mobile app development, performance optimisation, cloud computing, game design.
TECHNOLOGY	Ruby, Rails, Vue, React, Flutter, Rust, Python, C, C++, PostgreSQL, TypeScript, PHP.
EDUCATION	Bachelor of Engineering (IT), The University of Western Australia January 1991—December 1994 • Achieved straight A+ grades in final year. PhD (ABD), The University of Western Australia January 1995—December 1999 • Developed a sophisticated predictive small language model in C. • Submitted thesis in 1999, before relocating to the UK.
EMPLOYMENT HISTORY	Staff Engineer (Remote), Valiant Finance Pty. Ltd. August 2022—Present • Improved automated test performance by 5x, added autoscaling and read-only follower databases, and built live/demo shard-based autoswitching. • Introduced state machines, service objects and other best practices; vastly reduced code style violations across the codebase. • Implemented bank statement import, parsing, transaction tagging and metadata extraction. • Created a plug-and-play framework for integrating with multiple finance provider APIs, with adapters to convert between internal and provider-specific data formats. • Built an end-to-end pipeline for processing vendor quotes and inbound emails, including data extraction, conversion to internal representations, product identification, enrichment via third-party services and document creation. • Developed an intelligence framework for running LLMs as part of data enrichment, and adopted AI-first development practices. • Built core systems powering asset finance services for a major international client across Australia, the US and the UK.

Lead Engineer/CTO (Remote), Robots+Rockets/GroupFire LLC
March 2015—August 2022

- Managed a fully remote team of up to a dozen developers, designers and QA, establishing async standups, code review processes and video demonstrations of completed work.
- Wrote a data analytics and reporting engine, with a realtime user engagement front-end.
- Implemented dynamic code push updates for mobile apps to facilitate quick rollout of changes.
- Added realtime messaging, video processing and social media monitoring to our product.
- Established and managed a process to quickly onboard new corporate customers.
- The platform powers over 500 communities today, including Goldman Sachs and YPO.

Head of Development/Head of R&D, Agworld Pty. Ltd.
July 2011—March 2015

- Implemented a dependency-driven event queue to recalculate expensive derived data.
- Developed a unit conversion extension to ActiveRecord, with a clear separation of concerns.
- Designed and implemented a stand-alone sync server for iPad data to replace RhoSync.
- Wrote technical project documentation that led to us winning a cash-cow project.
- Took over a reporting project and worked with the team to refactor it under intense pressure.

Senior Geophysical Software Engineer, DownUnder GeoSolutions
January 2011—June 2011

- Returned to the workforce following a six-month sabbatical.
- Worked on well bore visualisation, correlation and mistie correction in Java.
- Made redundant after six months when development was moved to the Chicago office.

Consultant, Titan Interactive
February 2010—June 2010

- Introduced JIRA, daily stand-ups and weekly project post-mortems.
- Specified and designed an email campaign manager, and oversaw its development in Rails.
- Monitored the production pipeline, identifying blockages and working to optimise processes.
- Improved our throughput from three sites launched per week to almost twelve.

Project Manager, Living Years
March 2009—May 2010

- Joined six months before a drop-deadline product launch, with no development team.
- Interviewed and hired a development team of three people from over a hundred applicants.
- Planned and executed six two-week sprints with a physical backlog and burndown chart.
- Wrote code and tests and built and managed the continuous integration process.
- Launched on schedule after spending a month in beta testing.

Lead Programmer, Interzone Games
February 2007—February 2009

- Managed a team of thirteen programmers, while still writing C++ and Python myself.
- Worked with production, art and design to ensure required features were technically feasible.
- Assisted QA to properly report, reproduce and prioritise bugs.
- Created the physics engine, gameplay code, various tools and the build system.
- Participated in several “game jams” to prototype new gameplay concepts.

AI Team Lead, Team Bondi (*L.A. Noire*)
October 2004—February 2007

- Responsible for designing AI technology and implementing the bulk of the design in C++.
- Interviewed, hired, mentored and supervised a team of six developers.
- Oversaw the navigation system, intelligent camera, traffic simulation and NPC behaviour.
- Developed tools to allow game designers to enter and maintain game data.
- Established an automated build with unit testing, coding standards and software scheduling.

Programmer, Nautronix
January 2003—October 2004

- Fixed race conditions in unit tests that involved multi-threaded network communications.
- Campaigned for a smarter locking while minimising the side-effects of the current practice.
- Developed a program to process, resample and export large volumes of multi-channel audio.
- Designed and implemented a system for managing and monitoring on-site submarine testing, installing and testing the software on location.

Founding Director, Amristar
September 1999—January 2003

- Built an interactive mapping system for a local real estate business.
- Developed a centralised workflow operations system for a chain of automotive repair centres.
- Entered the Google Programming Contest with a text correlation system written in C.

Chief Scientist, Artificial Intelligence
July 2000—September 2001

- Designed and implemented language acquisition algorithms.
- Based in Tel Aviv, with regular trips to London where work continued remotely.
- Devised and announced the “Learning Machine Challenge” at the AAAI conference.
- Helped writers generate content for a commercial Siri-like software agent.

Programmer, Lionhead Studios (*Black & White*)
December 1999—June 2000

- Designed a scripting language for game designers and built a compiler to generate executable bytecode from their pseudo-code scripts.
- Built a multi-threaded stack-based VM to execute the bytecode, with a well-defined API for manipulating game entities.
- Packaged the system as a hot-reloadable DLL with a mocked game interface.

Freelance Developer
June 1997—September 1999

- Created a novel chatbot engine and sold it to a company in Germany.
- Developed a “kitchen sink” web portal for a South African entrepreneur.

Research Assistant, CSIRO
January 1990—December 1990

- Wrote programs in QuickBasic and ported legacy programs from Fortran.
- Tested various materials by installing “strain gauges” before subjecting them to destructive tensile forces using specialised equipment.

SIDE PROJECTS

Co-creator, Sesame **February 2022—May 2022**

- Built a password manager in Flutter using libSodium to derive secure passwords from a seed passphrase and service details, eliminating the need to store passwords.
- Launched on Android, iOS and desktop. See sesame.website.

Co-founder, The Punk Collective **March 2021—December 2021**

- Formed a game collective with three friends, shipping one game per month.
- Built and shipped seven games in vanilla C using Raylib, Flecs, cJSON and Nuklear.
- Released on Mac, Linux and Windows.

Contract Developer, Bamboo 61 Pty. Ltd. **April 2018—August 2018**

- Implemented a serverless API using AWS Lambda with Go functions.
- Set up end-to-end React Native app build and deployment to iOS and Android.
- Successfully shipped the beta version of the Bamboo app.

Founding Director, GeekPunk **July 2010—April 2013**

- Developed an innovative text entry technology to replace unwieldy OSKs.
- Launched a static web application with the best Q&As from *Stack Overflow*.
- Started GeekSalt, a small web development studio specialising in restaurant websites.

Founding Director, RocketHands **February 2009—August 2015**

- Started with six former employees of Interzone to pitch an Xbox360 title to Microsoft.
- Launched two titles on the iPhone and one title on the iPad.

SELECTED PUBLICATIONS

Copies of these papers are available on request. Please see [my blog](#) for more writing examples.

- *Language Acquisition and Data Compression*, 1997 Australasian Natural Language Processing Summer Workshop, 1997.
- *Finding Structure via Compression*, New Methods in Language Processing and Computational Language Learning, ACL, 1998.
- *Conversing with Stochastic Language Models*, Invited paper for the Third Workshop on Human-Computer Conversation, 2000.
- *A Unique Interplay between the Development of Learning Algorithms and their Education*, Modeling Cognitive Development in Robotic Systems, 2001.
- *On Creating a Baby Computer and Training it to Converse*, Artificial Intelligence and Applications, 2001.
- *Scripting for Undefined Circumstances*, AI Game Programming Wisdom, 2002.
- *Conversation Simulation and Sensible Surprises*, Invited book chapter for Parsing the Turing Test, 2008.
- *Artificial Intelligence as Entertainment: Towards Industry-Relevant Game AI Research*, IEEE Transactions on Computational Intelligence and AI in Games, 2011.

REFERENCES

See [my LinkedIn profile](#) for testimonials from former colleagues. References available on request.