

# Jarrold Connolly

## Strategic Engineering Leader | Principal Architect

A Principal Engineer and Strategic Engineering Leader with over 25 years of experience architecting and delivering high-impact, scalable systems across gaming, AI, and patented web technologies. Guiding cross-functional teams and departments, Jarrold shapes technical vision and roadmaps that align with strategic business objectives. His expertise spans deep technical innovation, cultivating high-performing engineering talent, and mentoring emerging leaders.

### Governance

#### Chairperson, Parent Advisory Council

Chaired strategic meetings, fostering collaboration among school administration, trustees, and diverse parent groups to enhance educational outcomes.

- Oversaw budget planning and grant applications, securing funding for community events.
- Led large-scale community initiatives, including fundraising events, strengthening engagement.
- Promoted inclusive decision-making, aligning policies with stakeholder needs.

#### Chairperson, City Advisory Body

- Guided strategic policy recommendations to the municipal council, shaping childcare services.
- Subcommittee evaluates proposals to allocate significant funding to not-for-profit organizations.
- Directed operator selection for city facilities, enhancing community access to quality childcare.
- Contributed to multi-year needs assessment and strategy, driving impactful municipal policy reforms.

### Research & Development

#### AI Research Chatbot

- Designed and led the development of a RAG-based AI system using Python and Qdrant to process large-scale technical documentation, advancing information retrieval.
- Enhanced retrieval accuracy with NLP-driven chunk scoring, surpassing traditional chunking methods, and optimized ingestion for high-performance hardware.

#### Complex Compiler

- Built a stream-based compiler, showcased at OpenJS World 2022, demonstrating expertise in compiler design. Creating a platform for ongoing R&D in compiler technology.

### Speaking

I presented "Writing a Compiler in Node.js Using Streams" at OpenJS World 2022, engaging global engineers with innovative insights into compiler design. ([Video](#), [Slides](#))

### Experience

#### Senior Staff Engineer | Respawn Entertainment (2024-Present)

- Strategically partnered with cross-functional security and anti-cheat teams to enhance game integrity and ensure fair play for a massive global player base.
- Led initiatives in comprehensive system documentation and architectural design, establishing foundational frameworks that drive clarity and alignment across engineering.
- Shaped technical approaches to critical challenges, ensuring scalable and robust solutions for high-demand online services.

### **Principal Software Engineer | Phoenix Labs (2022-2024)**

- Spearheaded the development of a new game backend, scaling its Python APIs to production readiness for millions of players.
- Exercised critical technical and product leadership, making key architectural decisions, including evaluation and integration of critical technology components, and integrating comprehensive observability.
- Led and mentored a distributed engineering team to launch-readiness, cultivating resilience and skill growth in dynamic environments.

### **Senior Software Engineer II | Kabam Games Inc. (2018-2022)**

- Acted as a strategic technical leader and team mentor within Central Tech, transforming it into a powerhouse and establishing clear roadmaps for shared game services.
- Mentored a high-performing engineering team, fostering innovation and technical excellence; solved complex challenges, including a critical chargeback system overhaul.
- Architected a massive Node.js backend supporting millions of players and implemented Kubernetes with CI/CD pipelines, boosting deployment efficiency and delivering cost savings.

### **Lead Software Engineer | Radware Canada (2013-2018)**

- Spearheaded development and delivery of high-impact solutions, including Node.js APIs and React UIs, delivering SAML security and patented HTTP/2 acceleration.
- Led a cross-functional team, overseeing the successful shipment of the FastView product for massive clients.
- Cultivated and grew agile workflows, enhancing team efficiency and fostering continuous delivery.

### **Senior Software Developer | Strangeloop Networks (2007-2013)**

- Played a pivotal role in 0-1 product innovation, co-building the industry's first Front-End Optimization (FEO) web accelerator with C#, leading to patented mobile technology.
- Scaled innovative solutions for massive audiences and mentored R&D teams, driving industry innovation and establishing new performance benchmarks.

### **Senior Software Developer | Intrawest (2005-2007)**

- Key role in modernizing enterprise e-commerce web experience; built a Web 2.0 booking system with C# and ASP.NET, powering resort operations.
- Integrated diverse data sources from resort and airline partners to enable comprehensive customer travel packages.

### **Software Developer | Tarasoft (2000-2004)**

- Primary developer, co-designing and coding the core of the revolutionary web-based Matrix MLS product from scratch.
- Instrumental in scaling Matrix into a massive platform, fueling widespread adoption and disrupting the industry across North America.

### **Patents**

[US 9292467 B2](#): Mobile Resource Accelerator (2016)

Co-invented a system to optimize mobile web performance, reducing latency and enhancing user experience for global brands.

[US 10616356 B2](#): HTTP/2 Resource Push Optimization (2020)

Developed HTTP/2 optimization techniques, improving enterprise web application efficiency through strategic resource prioritization.