

Summary	I'm a generalist programmer, enthusiastic learner, and experienced communicator with 12 years of professional programming experience in a broad variety of demanding technical environments. In my next role, I'm looking to provide tailored tooling solutions to game developers and artists.		
Skills + Languages	Full-Stack Web Development, Cloud Architecture, Identity Management, Tooling, UX, Functional Design, Product Management TypeScript/JavaScript, Clojure/ClojureScript, Terraform, Java, Kotlin, Rust, C, Erlang, Haskell, Lua, C#/F#, Git, HTML/CSS, Web Components, React, SQL, NoSQL, GraphQL, Datalog, FRP, SAC, ECS, AWS, Azure, GCP, JIRA, Agile, Scrum, Kanban, GTD, PKM, Zettlekasten		
Experience	Co-founder, Principal Architect, Design Lead — NuID, Inc. 2017-2022		
	+ Designed and implemented an elastic, highly available authentication API and web-based developer portal using Clojure, Java, Typescript, React, Terraform, and AWS (Lambda, SQS, SNS, S3, EC2, Dynamo).		
	+ Led small, distributed teams across product development, engineering, and design, which were responsible for onboarding thousands of users to our zero-knowledge authentication service and public key infrastructure.		
	+ Increased the productivity of our developer organization by adhering to web standards and frameworks, cost-optimized cloud-native architecture, Agile methodologies, CI/CD, live previews, Git, and infrastructure-as-code.		
	+ Collaborated with professor of cryptography and ACM Fellow Jonathan Katz to develop a zero-knowledge authentication protocol for which we were granted patents US 10880089, 11496310.		
	Data Scientist — Microsoft 2015-2017		
	+ Led development and analysis of a machine learning model for device age, informing high-level Windows 10 marketing and delivery strategies across the Windows organization.		
	+ Wrote and maintained data pipelines in Apache Spark and Hadoop-like architectures powering insights dashboards relied upon by our senior leadership and the CTO of the Windows and Devices Group.		
	+ Designed and implemented a compiler and toolchain in C#/F# to improve metric accuracy, reliability, and compute efficiency.		
	Software Engineer — Rustici Software 2013-2015		
	+ Contributed to open-source eLearning libraries and browser extensions to increase adoption of an emerging specification and establish new revenue streams for our team.		
	+ Designed and implemented an open-source conformance suite for testing new and existing library implementations, leading to an ecosystem-wide improvement in compatibility and improving the visibility of our products.		
Education	M.S. Computer Science — Vanderbilt University 2013-2015		
	+ Thesis: <i>Design Patterns in Concurrent and Asynchronous Systems</i>		
	+ Project: <i>Distributed Online Record Linkage</i>		
	B.S. Computer Science — Vanderbilt University 2011-2015		
	+ GPA: <i>Cumulative 3.777/4.0 — Major 3.854/4.0 — M.S. 4.0/4.0</i>		
	+ Completed B.S. and M.S. in 4 years		
	+ Fine art minor focusing in drawing and printmaking		
References	J.D. Hollis — jd@theconsultingcto.com		
	+ Collaborator on infrastructure at NuID		
	Pallavi Baral — pabaral@microsoft.com		
	+ Manager and team lead at Microsoft		
Interests			