Summary

I'm a generalist developer, enthusiastic learner, and experienced communicator comfortable in a broad variety of demanding technical environments. I thrive in small, focused teams with a high degree of accountability. In my next role, I'm looking to provide powerful tooling to end users, remain adjacent to the web, and surround myself with a diverse team of ambitious and talented programmers.

Skills + Languages

Full-Stack Web Development, Cloud Architecture, Identity Management, Tooling, UX, Product Management

TypeScript/JavaScript, Clojure/ClojureScript, Terraform, Java, Rust, C, Erlang, Haskell, Lua, Git, React, AWS, Azure, GCP, JIRA, Agile, Scrum, Zettlekasten, GTD

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 on-boarding 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, live previews, Git, and infrastructure-as-code.
- + Collaborated with a world-class professor of cryptography, 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.
- + 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: Design Patterns in Concurrent and Asynchronous Systems
- + Project: Distributed Online Record Linkage

B.S. Computer Science — Vanderbilt University

2011-2015

- + GPA Cumulative: 3.777/4.0 Major: 3.854/4.0 M.S.: 4.0/4.0
- + Earned 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