

JENA R. HANES

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Seasoned full-stack engineer seeks a position that involves in-depth application architecting and development; allows for personal growth through technical challenges and promotion; and supports an organization that is dedicated to greater social good and that values a culture of collaboration, creativity, and caring. Specifically seek chances to contribute to real-time streaming data applications or data-based ML recommendation or AI decision-making applications.

CORE SKILLS

Asynchronous reactive programming, real-time data pipelines and processing, IoT cloud-to-edge/edge-to-cloud.

Languages, Libraries, and Frameworks: Java, Java11, Kotlin, Scala, C, C++; Golang; Javascript (ES6), Racket, Scheme, Pie, Haskell; Python; HTML5, CSS3, PHP, Polymer; HDL, Verilog; Protobuf; Node.js, Lombok, Spring, Spring WebFlux, Misk; JUnit, Mockito, Mocha, Sinon; Salesforce Reference Architecture (SFRA) and Salesforce Commerce Cloud (SFCC); containerization (Kubernetes and Docker).

Cloud Technologies: AWS Java SDK; AWS CLI; IAM, CloudFormation, DynamoDB, Lambda, Kinesis, EC2, S3, ECS.

Data: Kafka, EventHub, Pulsar, Flink; GraphDB/GraphQL, NoSQL/DynamoDB/MongoDB, DataStax DSE, SQL/MySQL; Gremlin.

Embedded Systems: ARM Cortex-M3, Digilent Basys3 FPGA, Vivado Design Suite, Arduino (C++), and Raspberry Pi (Java).

Development and CI/CD: Postman, Swagger; Propel, Jenkins/Travis; Bitbucket/Git, Rally/Jira.

Engineering Paradigms: OOP; Microservices; Modular, Layered, and Monolithic Architectures; distributed real-time data processing; Networking protocols; TDD; SOAP and RESTful web services; CICD; Agile/Scrum.

EDUCATION

B.S. Computer Science, specialization in Programming Languages * Indiana University 2017. *GPA 3.849*

M.S. Secondary Science Education * Indiana University 2004. *GPA 3.968*

B.S. Microbiology * Indiana University 1994. *GPA 3.461*

WORK EXPERIENCE

*Senior Full Stack Developer & Acting Tech Lead * COLUMBIA SPORTSWEAR * Remote * March 2022 to present*

- ✓ Acting tech Lead, acting Scrum Lead, and acting Tech Analyst on the Support Engineering team.
- ✓ High-level incident response; active contributor to code reviews; oversee team's ticketed work from refinement to completion; provide thorough documentation (i.e. architectural models, how-to docs, knowledge bases) and participate in cross-team demos; mentor new teammates; initiated and now serve as a host to pair coding sessions, developer round tables, and regular touch-base meetings with cross-functioning teams.
- ✓ Provide senior-level guidance and engineering support for security initiatives including blocking CSP implementation and third-party bot and script attack prevention, monitoring, detection, and mitigation.
- ✓ Developed a customized real-time inventory data delivery solution that amped observability and improved response-time of valuable business decisions during company Flash Sale.
- ✓ Provide senior-level developer support of core web performance monitoring and improvements.
- ✓ Improve and enhance several integrated monitoring and alerting initiatives; identified and corrected issues with experimental SFCC to AWS to New Relic log ingestion service; significantly improved alert quality/reduced noise.
- ✓ Assuming architects' backlog to develop several POC apps dealing with log ingestion, monitoring, and alerting services.
- ✓ Serving as a cross-team senior developer, contributing to both the SFCC-SFRA and AWS microservice code bases (Node.js Javascript ES6), working on large refactors, test coverage and other tech debt, and high-volume error root cause identification and fix implementation.

*Full Stack Developer & Acting Tech Lead * CASH APP * Remote * October to December 2021*

- ✓ Provided architectural and technical senior leadership to a newly-formed team starting work on a new project.
- ✓ Developed system architecture and data models, established data mappings and schema.
- ✓ Documented design decisions and related information in Technical Design and other documents.
- ✓ Developed Epic Road Map and detailed implementation steps in ~30 Jira tickets.
- ✓ Provided foundational Kotlin code base and development environment (Misk, gRPC, Protobuf, AWS Dynamo, GraphQL).
- ✓ Worked with business leaders, dependent teams, and clients to ensure needs and deadlines were met.
- ✓ Provided team guidance in code reviews; mentored and supported new teammates; put into effect pair sessions and regular, inclusive meetings to build the skills and morale of the team.

AWS Developer * COLUMBIA SPORTSWEAR * Remote * February to October 2021

- ✓ Provided senior-level engineering support for the company's transition between Email Service Providers (ESPs).
- ✓ Made significant development contributions to company Javascript microservices in an SFCC-AWS eComm system (production-level coding, debugging, testing, reviewing, refactoring, and abstracting).
- ✓ Active participant in Agile/Scrum ceremonies and procedures (refinement, planning, pointing, daily scrum, retros, demos, and round tables).
- ✓ Provided additional support with documentation, and with QA, E2E testing, UAT, and Prod Validation efforts.

Back End Applications Developer * AT&T ENTERTAINMENT * El Segundo, CA * March to November 2020

- ✓ Provided backend engineering support to the development of an internal Broadcast Programming Operations change audit tool working on a Node.js express server with GraphQL and MySQL db.
- ✓ Architected and developed custom GraphQL Node express server-to-MySQL Data Access Layer.
- ✓ Led Phase 2 to utilize internal and external data sources:
 - Responsible for Application Architecture and Epic design; formalized Schema and database architecture, data models, and data definitions; ensured complete, concise, and thorough documentation for all of the above.
 - Completed refactoring to allow for input from multiple data sources.

Senior Software Developer * CYMATIC * Remote * July 2019 to January 2020

- ✓ Architected, developed, and tested reactive Java11 SpringWebFlux real-time data processing rules engine microservice application (functional programming in Java, Spring 5, Lombok, SpringWebFlux, and cybersecurity).

Senior Software Engineer * MOSAIC * Oakland, CA * November 2018 to July 2019

- ✓ Served on an Agile team developing new features for a start-up fin-tech monolithic application primarily in Scala.
- ✓ Provided full-stack engineering support including coding, reviewing, debugging, refactoring, writing tests, and testing.

Software Engineer * SUNPOWER * Richmond, CA * January to October 2018

- ✓ Served on a proof-of-concept team developing industrial-scale IoT solutions.
- ✓ Responsible for writing, refactoring, debugging, and testing production-level jAWS Lambdas in Java.
- ✓ Contributed to other teams' codebases: Backend Cloud Software (Java Spring, NodeJS, CloudFormation YAML templates, Protobuf); Firmware (C++).
- ✓ Designed, programmed, and managed ETL operations in AWS (Lambda, DynamoDb, S3).
- ✓ Provided expertise with IAM Roles and Policies, DynamoDB, Lambda, EMR, Cloud Formation, Glue.

Software Engineer * GE DIGITAL * San Ramon, CA * July 2017 to January 2018

- ✓ Served on an agile R&D team developing IoT cloud-to-edge/edge-to-cloud event-driven microservices.
- ✓ Full-stack support of microservices: Responsible for writing, refactoring, debugging, and testing production-level code in Java, Golang, Javascript, and Polymer in a pair-programming environment.
- ✓ Provided related systems oversight and support: Kafka and MQTT connections; Elasticsearch instances and other AWS services including Lambda, EC2, S3, and ECS; DSE GraphDB; OAuth 2 implementation; CI/CD with Jenkins and Propel.
- ✓ Received directed mentorship, participated in Architects' Meetings, engaged in agile team-directed development.

Software Engineer * IMAGE MATTERS, LLC * Bloomington, IN * April 2016 to April 2017

- ✓ Served as point person on schema generation and data modeling for early phase architecture of a geospatial metadata standards software application; participated in associated metadata standards committee and planning meetings.
- ✓ Served as back-up for debugging, refactoring, and abstracting code in Java and JavaScript.
- ✓ Worked in a collaborative environment to deliver projects on-time and within scope.

Instructor * INDIANA UNIVERSITY * Bloomington, IN * January 2016 to June 2017

- ✓ Provided teaching excellence for "Introduction to Computer Science" (Racket) and "Data Structures" (Java).
- ✓ Led lessons in regular lab sessions and directed activities and exercises to teach algorithms and data structures.
- ✓ Provided additional student support in weekly office hours sessions, study sessions, and through mentorship.
- ✓ Generated useful feedback for students when grading assignments (conducted code reviews).

Web Applications Developer * INDEPENDENT CONTRACTOR * Bloomington, IN * July 2005 to July 2017

- ✓ Handled all aspects related to the design and project management of web application front-ends including generating wireframes and mock-ups and working with clients through small and large-scale changes, and ensuring clients expectations were met.
- ✓ Developed web applications using HTML/HTML5, CSS/CSS3, PHP, and Javascript; implemented styles such as long-scroll and parallax without tools.
- ✓ Managed web application maintenance, updates, and features as requested by clients.

- ✓ Maintained security, accessibility, usability of web applications through browser updates and deprecations.
- ✓ Kept up-to-date on relevant developments in languages, web applications, and design trends.

Database and Applications Architect * INDEPENDENT CONTRACTOR * Bloomington, IN * Sept 1998 to July 2017

- ✓ Handled all aspects of database development including schema generation, data models and definitions.
- ✓ Built applications on relational databases with user-friendly interfaces using FileMaker, MSAccess, SQL, and MySQL.
- ✓ Developed both SOAP- and REST-based data services.
- ✓ Managed and maintained databases and handled new requests such as generating reports.

OTHER SELECT WORK EXPERIENCE

- ✓ Served as a middle- and high-school science, math, and health teacher of at-risk children for five years.
- ✓ Provided accounting, management, computing, HR, and other executive administrative support to various nonprofits and/or educational organizations: Bloomingsfoods Cooperative (four years); PDK International Education Organization (five years); Midwest Political Science Association (seven years); Indiana University (eleven years).
- ✓ Proven experience leading, directing, and supervising a team; expertise with interpersonal relations – customer service, donor relations, and employee relations; well-developed business skills and acumen.

AWARDS

Computer Science:

School of Informatics and Computing Dean's List (2016-2017)

Schnabel Scholar (2016-2017)

Anita Borg Scholar (2016)

School of Informatics and Computing GHC Scholar (2015)

Teaching:

Fund for Teachers Award (2007)

Decatur Township Education Foundation Grant (2007)

Monroe County Community Foundation Grant (2006)

Microbiology:

L.S. McClung Award (1994)

PROJECTS

Lambda Theta Omega Pi: Providing remote-based computer science instruction and junior developer internships (ongoing)

RadioHead: Music/Radio app Spring Boot on AWS (ongoing project)

HoodieOrNot: Weather app on AWS services (ongoing project)

Bar Crawl: Game written in scheme (ongoing)

Pet Sitter: IOT project using sensors and RFIDs and network connections (ongoing)

Crimson Bot: Participated in a team project involving EEG sensors, computer vision, and the FRDM K64.

PROFESSIONAL DEVELOPMENT

Github Universe 2020

(seventh RacketCon)

MIT Professional Education: *Internet of Things: Roadmap to a Connected World*

University of California, Irvine Extension: *An Introduction to Programming the IOT Specialization*

Yonsei University: *Emerging Technologies Specialization*

Stanford Online Lagunita: *Networking – SP Introduction to Computer Networking*

PUBLICATIONS

Hanes, J., and Sadler, T. (2005). *Inquiry in the community: Students practice scientific inquiry by investigating local environmental issues. Science Teacher*, 72 (4), p. 42-43