Dennis S. Hennen

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Experienced Full Stack Developer Specializing in Backend

Seeking new challenges with a focus on backend or tooling, preferably in functional programming, and/or interesting problems involving large amounts of data. I'm smart, but I don't want to be the smartest person in the room. I'm looking for somewhere I can grow and learn. Extensive full stack development experience with Linux and AWS system administration skills. Learn new technologies, languages and frameworks quickly. Excellent logic, mathematical, analytical, written, and verbal communication skills and strong leadership abilities.

Education

- M.S. in Computer Science, Ohio State University, December 1999.
- B.S. in Computer Science and Mathematics, *magna cum laude*, Lipscomb University, December 1997.
- Functional Programming Principles in Scala & Principles of Reactive Programming, Coursera. 100%. 2015.

Experience

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Haskell
Scala

JavaScript
TypeScript
React
Redux
NodeJS

PHP
Python

MySQL
Elasticsearch
DynamoDB
SQS
RabbitMQ

Linux
AWS
Docker
DevOps

Exposure

C / C++
Ruby
Java
Perl

Lead Software Architect   Seller Labs, March 2016 to July 2021
- Responsible for leading discussion and decision making on company-wide architecture items such as languages, data stores, and integration between various products.
- Deep integration with **AWS** using **CloudFormation, ECS, RDS, DynamoDB, SQS, Lambda**, and several other services.
- Re-engineered our entire deployment process for push-button deploys via Slack. Created Docker environments for local development and staging data for testing. Greatly increased productivity and QA ability.
- Using **Laravel** framework in **PHP** to write distributed tools to collect and display and analyze massive amounts of data about Amazon products. Heavy optimalization **MySQL** databases. Helps give sellers insights to be more profitable.
- Write and maintain backend processes in **Haskell**.
- Acted as ScrumMaster. Received ScrumMaster certification.

City Councilmember   City of Berkley, Michigan (DennisHennen.com), Nov 2017 to Present
- Set the standard in the city for a successful campaign through door-to-door canvassing, extensive use of Facebook and AdWords advertising, and heavy use of technology.
- Have increased city communication, increased training, improved underperforming departments leading to increased service and employee morale, and keep spending within the city's means.
- Bring an analytical approach that is often missing in government leadership.

Principal Software Engineer   Life Time Fitness, Sep 2012 to Mar 2016
- Developed on-line registration and timing software in **PHP** with **MySQL** for endurance races with over 10 million users and $300k in daily transactions.
- Refactored several large areas of code improving quality, maintainability and speed.
- Designed several large system components, including all financial processing and accounting responsible for over $100 million in transactions per year.
- Wrote daemon for synchronizing event registration and results between servers at a race and the "cloud." Designed to operate in adverse conditions with poor Internet connectivity.
- Refactored athlete registration process using AngularJS.
- Maintained server side race scoring and social messaging services in **Scala**.
- Team lead for registration product. Performed code reviews, mentored junior developers, and approved architectural changes.
- Worked with stakeholders to identify current and future business requirements and develop quality solutions. Advised management of potential improvements that could increase profit or customer satisfaction.
- Heavy integration with **Amazon S3, Elasticsearch, RabbitMQ**, many third-party APIs and providing our own REST API.

Senior Software Engineer Comcast, Jan 2012 to Sep 2012
- Developed internal reporting website in **PHP** for the central division capacity group who tracks and manages video, Internet and telephony growth.
- Greatly simplified site framework for adding new reports.
- Analyzed and generated reports on large **MySQL** datasets consisting of millions of records of capacity data.
- Taught team MVC concepts, ORM technology, and general web development and security best practices.
- Made significant improvements to code quality, site usability, speed, security, and browser interoperability.
- Optimized database queries and indexes for faster data loading and reporting.
- Developed forecasting and analysis site for budget preparation.

Software Architect English360.com, Jul 2009 to Dec 2011
- Designed and developed large **CakePHP/MySQL** application.
- Specialized in design and implementation of new models and complex **MySQL** interactions.
- Significantly cleaned up original code, added unit testing, fixed bugs, making code easier to work with.
- Heavy use of **jQuery** and AJAX. Wrote or extended several jQuery plugins.
- Customized or created several components for web WYSIWYG editor requiring extensive cross-browser JavaScript.

Software Architect, Project Manager American Registry, Nov 2006 to Mar 2009
- Responsible for programming and most of the architecture of their large **CakePHP** application.
- Refactored and streamlined code and **MySQL** database to provide significant speed improvements.
- Successfully managed five programmers from around the world.

Full Stack Developer, Owner 28 Studios, Nov 2000 to May 2002; Feb 2006 to Present
- Work with clients to develop or improve their websites.
- Update existing code to fix bugs and add new features.
- Pick new systems and services and transition data to meet client's needs.
- **System administration** of web, email, DNS, etc. on **Linux** based servers.
- Created sites for political candidates. Taking donations, list processing for targeted advertising, and mapping applications to plot data about voters on Google maps.

Software Analyst Progressive Medical, Aug 2005 to Feb 2006
- Maintained and wrote new software for **PHP** based intranet. Performed design activities for future projects.
- Refactored report generation software to greatly reducing execution time.

Data Miner, Researcher, Developer American Heuristics, Feb 2001 to Jul 2005
- Performed research and development of data mining technologies.
- Improved performance of core technologies and developed several applications utilizing them. Included credit card fraud detection and a network intrusion detection system (IDS). Used **Java**, **C++**, and CORBA.
- Created small websites (**PHP/MySQL**) and customized applications for clients.
- Administered **Linux** server running web, email, and DNS.

Full Stack Developer, Owner MockElection.com, Oct 1999 to Feb 2003
- Made and executed all technology decisions. Used LAMP stack.
- Software design, development and maintenance, database administration, and Linux administration.

Research Assistant Ohio State University, Jun 1999 to Dec 1999
- As part of master's thesis extended JavaScript's object-oriented features and created a generic library to help create complex web-based interfaces.
- Wrote compiler that translated ECMAScript 2.0 into JavaScript 1.2 that could be run on existing browsers.
- Related work using **Java** and **Perl**.

Publications

- Hennen, Dennis S. "The Object-JavaScript Language." Master's Thesis. The Ohio State University. 1999.
- Hennen, Dennis S., Suresh Ramachandran and Sandra A. Mamrak. "The Object-JavaScript Language." Software: Practice and Experience 30 (2000): 1571-85.

Honors, Accomplishments, and Organizations

- Ohio Board of Regents Fellowship (a full scholarship and stipend for Master's program), 1998.
- Member and coach of the Ohio State University's programming team for the 1998 and 1999 ACM Regional Programming Competition.
- Inducted into Upsilon Pi Epsilon, Honor Society in the Computing Sciences, 1999.
- Secretary, President of WOOSE.org, a grass roots organization opposed to the expansion of Ohio State University's airport. The organization was successful in curbing expansion and forcing the university to address noise complaints. 2003 to 2007.
- Member of Toastmasters International, 2015.

Projects, Training & Certifications

- Core Elasticsearch: Developer. Intensive two-day training and labs on Elasticsearch. 2016.
- Certified ScrumMaster, Scrum Alliance. License 557552. 2016.
- Principles of Reactive Programming, Coursera. 2015.
- Introduction to Big Data, Coursera. 2015.
- Hadoop Platform and Application Framework, Coursera. 2015.
- Functional Programming Principles in Scala & Principles of Reactive Programming, Coursera. 100%. 2015.