# Jason Kumpf

Laurel, MD | kumpf.jason@gmail.com

# Experience

# Software Engineer

Senseye - November 2017 - December 2018

Worked with both customers and other developers to develop various tools and additions to the data ingestion pipeline, which fed the main product. Worked heavily on and with micro-services and AWS in a fast-paced, scrum driven, fully remote and very agile development team. Being remote for 90% of the team, communication and documentation was vital. During a transition of project management, my team began the switch to TypeScript and more sophisticated AWS/ECS integration for both testing and continuous integration.

#### **Adjunct Faculty**

University of Cincinnati - August 2015 - June 2016

Full time adjunct faculty member (in the College of Education, Criminal Justice and Human Services IT Department) responsible for teaching courses on contemporary programming in C# and front-end web development. Other courses were network design and database design with SQL Server. Also responsible for advising senior capstone projects for 35 seniors through the course of their projects development.

### Senior Software Engineer

Academic Benchmarks - March 2013 - November 2014

Participated in all phases of the software development life-cycle, including the architecture of solutions, creation of design documentation, coding and developing test plans. Provided multiple aspects to solve problems and coordinate team discussions to decide on the best solution not only for the given problem but, for potential larger issues. Helped to provide leadership to the team and mentor more junior developers. Brought a creative perspective to projects and/or solutions to problems so as to broaden the scope and determine other potential impacts throughout the product line and/or customers. Constantly stayed current on the latest technologies and best practices in web and software development and always looking for ways to improve the quality of the team and our development process.

# Research Assistant - Web/DB/SysAdmin

University of Cincinnati Infrastructure Institute - September 2008 - August 2014

Responsible for upgrading and converting the research group's web application for reporting the real time status of various bridge monitors or monitoring of sensor data projects which included a real time assessment of the general public's physical safety from potential harm due to certain weather conditions. (see Paper below). The systems grew as several new projects were taken on at the beginning and through the time spent there. Most projects involved pretty complex decision making and time critical scheduling often times over unreliable connections and several weather damaging events. Lead the group into rebuilding the whole system into a more robust and standardized solution from code down to methods for implementing new systems and new features.

#### Interim IT Director

University of Cincinnati - June 2004 - August 2008

Started as Applications analyst developing and improving software developed for various custom aspects of the IT infrastructure and operations. Took over system administrative responsibilities of former employee managing IT infrastructure affecting 200+ employees and 5000+ students data and access to those IT resources. Became the Interim IT Director upon request of supervisor to perform the duties of another former employee responsible for managing the IT staff, support operations and computer classroom equipment. Managed \$500,000 annual budget to support the 600+ computer systems, data center and staff salaries.

#### **Applications Analyst**

University of Cincinnati- June 2004 - August 2008

Responsible for maintaining and supporting IT operations affected by both Victory Parkway and Clifton campus data centers and equipment. Operations affected include login of all CAS computer labs, faculty and staff office computer login and shared file access. Will provide constant monitoring of server and network performance to provide fault tolerance for critical applications and reduce redundancy of services/applications. Additional duties include the development of support materials (CMS or Technical knowledge, manuals, etc.), conducting occasional training sessions, moderate supervision of team members' projects and student workers.

# Programmer/Analyst

Scenario Learning/Safe Schools - 10/2002 - 1/2004, Cincinnati, OH

In charge of developing a web application involving extensive Perl, XML, XSL, Apache, MySQL, and ActionScript knowledge. Current projects include developing an in-house SGML/XML document management system to be used to synchronize on-line documents with in-house documents. Came up with an easy solution to convert MS Word documents to SML/XML DocBook markup.

# Programmer/Analyst

Thinkronize/Knovation - 6/2000 - 10/2002, Cincinnati, OH

Determine system requirements by working with programming manager, product managers, and others as needed. Provide technical perspective to high-level design discussions. Develop system designs that effectively meet user requirements, efficiently operate, and effectively integrate with other systems. Develop and write software that operates efficiently and provides flexibility for future revisions. Fully test software and place into production. Resolve issues related to production software. Provide support for staff PCs and SunRay Workstations, including internal networking. Aid in development and support of internal software used daily by most of the staff which served the primary library or knowledge base for the company's product line and services.

#### Education

#### **B.S.** Information Engineering Technology

University of Cincinnati - September 1997 - June 2001

• Senior Design Project: Web-Based Virtual Laboratory (Content Management System)

#### **B.S.** Mechanical Engineering Technology

University of Cincinnati - September 1994 - June 2001

• Senior Project: Automated Data Collection System for Heat Transfer Laboratory Experiment

### Ph.D. (ABD) Electrical Engineering

University of Cincinnati - September 2008 - May 2015

- Relevant Coursework: Intelligent Systems, Multi-variable Control, Stochastic Models.
- Extra: Completed the Preparing Future Faculty Training
- Research Topic: Calibration of Finite Element Models for Online Bridge Health Monitoring Systems

# **Publications**

Kumpf, J., Helmicki, A., Nims, D., Hunt, V., and Agrawal, S. (2012). "Automated Ice Inference and Monitoring on the Veterans' Glass City Skyway Bridge." J. Bridge Eng. 17, SPECIAL ISSUE: Nondestructive Evaluation and Testing for Bridge Inspection and Evaluation, 975-978.

# References

Available Upon Request