

## Summary

- » 21+ years of professional experience designing, implementing and delivering scalable software systems.
- » Led team of software architects to have a major positive impact on the broader engineering organization.
- » Several decades of experience working with distributed systems using tools including Java, Scala, JavaScript, Python, Docker, and Kubernetes.
- » Led several migrations from legacy deployment technologies to Docker and Kubernetes.
- » Skilled leader of technical engineering teams.
- » Passionate about leveraging the right technology for the right situation.

## Professional Experience

### **VP of Architecture & Principal Lead Architect** ***InMoment***

Oct 2018 - Present  
Pittsburgh, PA

- » Led architecture of the XI Platform.
- » Led team of architects in guiding engineering teams to solve challenging problems.
- » Developed and led cloud strategy on AWS.
- » Designed and led the implementation of operational visibility strategy.
- » Architected systems to improve scalability and performance of our platform.
- » Trained engineering organization on Kubernetes, Docker, Operational Visibility, Kafka and other topics.
- » Guided adoption of GraphQL APIs including Graph Federation.
- » Led several migrations to the cloud and Kubernetes.
- » Participate in technical due diligence for acquisitions.
- » Led overhaul of engineering hiring process.
- » Led design and implementation of a new on-call process.
- » Created and led the Architecture Guild.
- » Designed and instituted a Component Maturity Process.
- » Led efforts in horizontal and vertical auto-scaling of services.
- » Wrote and released Open Source tooling for Operational Visibility Automation (Kibana Sidecar).
- » Led standardization of CI/CD processes throughout the organization.
- » Researched, evaluated and determined which new technologies and tools the organization should leverage.

*Languages:* Java, JavaScript, TypeScript, Bash, Groovy, Python, SQL.

*Software:* Apollo GraphQL, Apache Kafka, AWS Services, Docker, KEDA, Kubernetes, Elasticsearch, RabbitMQ, ActiveMQ, PostgreSQL, Redis, Node.js, Bamboo CI, Maven, MongoDB, OpenTelemetry, Grafana, Prometheus, ELK Stack, Ubuntu and CentOS Linux.

### **Advisory Software Engineer** ***IBM Watson***

June 2014 - Oct 2018  
Pittsburgh, PA

- » Led team of engineers in developing several components of the Watson Discovery Service.
- » Developed and deployed multi-tenant cloud-based applications.
- » Developed scalable document ingestion system using Scala and RabbitMQ.
- » Designed and developed Neural Networks.
- » Triaged and debugged production systems during critical deadlines.
- » Designed and deployed distributed systems on Docker and Kubernetes.
- » Designed and implemented user-friendly REST APIs.
- » Integrated with internal and third-party REST APIs.

*Languages:* Scala, Java, Groovy, Python, SQL.

*Software:* Docker, Kubernetes, Elasticsearch, RabbitMQ, PostgreSQL, Redis, Etc, TensorFlow, OpenWhisk, Node.js, Jenkins, Gradle, Mesos/Marathon, JUnit/ScalaTest, Cassandra.

## **Lead Software Engineer**

Aug 2008 - May 2014

### ***Autonomy Corp. / Hewlett-Packard***

Denver, CO

- » Led teams of engineers as Scrum Master in Scrum Agile methodology.
- » Developed scalable Social Media Analytics distributed system in Java, Groovy, RabbitMQ and MongoDB.
- » Developed Legal & Compliance distributed systems in Java and C++.
- » Implemented integration with several Autonomy and third-party components and APIs.
- » Reviewed technical research papers for internal technical conference.

*Languages:* Java, Groovy, C++, SQL, JavaScript, HTML, CSS, Sass.

*Software:* Spring, Spring MVC, ExtJS / Sencha, SQL Server, PostgreSQL, Vertica, RabbitMQ, MongoDB, CouchDB, Node.js, IDOL, IDOL Connectors, Apache FOP, Hudson/Jenkins, JUnit.

*APIs:* OAuth, Twitter API, Facebook API, DataSift API, Moreover API.

## **Software Engineer**

Jan 2008 - July 2008

### ***WonBid, LLC***

Pittsburgh, PA

- » Developed online auction platform in Python and Django.
- » Developed REST API supporting both XML and JSON.
- » Administered Linux servers.
- » Submitted patches to open source projects.

*Languages:* Python, SQL, JavaScript, HTML, CSS.

*Software:* Django, PostgreSQL, jQuery.

## **Graduate Teaching Assistant, Graduate Research Assistant**

Aug 2006 - Dec 2007

### ***Georgia Institute of Technology***

Atlanta, GA

- » Directed lab for Computer Architecture and Operating Systems.
- » Investigated QoS in distributed information systems.

*Languages:* Java, C++, XML/XSL/XPATH.

*Software:* DDS, Xerces, libXML.

## **Research Analyst**

May 2007 - July 2007

### ***Air Force Research Laboratory / Information Directorate***

Rome, NY

- » Accelerated XML predicate evaluation by 15 times.
- » Integrated XML predicate evaluation engine into the 100X Joint Battlespace Infosphere (JBI).

*Languages:* Java, C++, XML/XSL/XPATH.

*Software:* DDS, Xerces, libXML.

## **Lead Web Developer**

May 2005 - Jan 2007

### ***Goldhead Group Ltd.***

State College, PA

- » Created a dynamic e-commerce website using PHP and MySQL.

*Languages:* PHP, SQL, JavaScript, CSS, HTML.

*Software:* MySQL.

## **Software Developer**

May 2004 - Aug 2006

### ***Westinghouse Electric Company / Engineering Computing***

Monroeville, PA

- » Developed nuclear fuel analysis software in Java, C, and C++.

*Languages:* Java, C++, C, XML/XSL/XPATH.

*Software:* Maven, CruiseControl, JUnit, Apache Forrest.

---

	<b>Web Developer</b> <b>Affinity Connection, Inc.</b> » Created multi-tenant data-driven PHP websites with MySQL. <i>Languages:</i> PHP, SQL, JavaScript, CSS, HTML. <i>Software:</i> MySQL.	June 2002 - Aug 2003 State College, PA
<b>Skills</b>	<b>Software Development:</b> Scala, Java, Groovy, Python, Rust, C++, PHP, C, Perl, JavaScript, Matlab, UML, ExtJS / Sencha, jQuery, CSS, Spring, Hibernate, HTML <b>Database &amp; Search Technologies:</b> Elasticsearch, Redis, Etcd, Cassandra, MySQL, SQL Server, PostgreSQL, DB2, Vertica, MongoDB, CouchDB, Autonomy IDOL, Lucene/Solr <b>Platforms:</b> AWS, Amazon Kubernetes Service, IBM Cloud, Kubernetes, Mesos/Marathon, Docker, Amazon S3, IBM Cloud Object Storage <b>Build Automation:</b> Git, Jenkins, Gradle, Ant, Maven	
<b>Research</b>	"Using YFilter Concepts for Fast Brokering in the Joint Battlespace Infosphere" "FSFS: A Fault Tolerant, Secure, Distributed File System" "Next Generation Radar and Signal Processing on the Cell Broadband Engine"	
<b>Education</b>	<b>Georgia Institute of Technology</b> Master of Science in ECE Major: Electrical and Computer Engineering	<b>GPA: 3.87</b> December 2007
	<b>University of Pittsburgh</b> Bachelor of Science in Engineering Major: Computer Engineering	<b>GPA: 3.85</b> August 2006
<b>Awards Received</b>	"Leave Your Mark" Recognition, InMoment <b>Outstanding Technical Achievement Award</b> , IBM Watson <b>Superman Award</b> , IBM Watson <b>Eagle Scout Award</b> , Boy Scouts of America <b>Outstanding Graduate Teaching Assistant Award</b> , Georgia Institute of Technology <b>Dean's List</b> , University of Pittsburgh and Georgia Institute of Technology	

---