# **ALEX JOSEPH BERGMAN**

Website: www.ajbergman.com Email: alex@ajbergman.com Phone: 248-930-5627

Skills

Languages: Java, C++, Python, PHP, SQL, JSP/JSTL, HTML, JavaScript (JQuery), CSS,

XML, JSON, German

Cloud: Azure, PCF, Azure ServiceBus

Frameworks: Spring, Spring Boot, Struts, Tiles, Hibernate, Bootstrap, MVC Networking: HTTP, REST, SOAP, MQTT, AMQP, TCP/IP, UDP, CAN

Database: MySQL, Oracle, PL/SQL, Microsoft SQL Server

Server: Linux, Windows, Apache Tomcat, JBoss, MAMP, WAMP OS: Windows, Mac, Linux (Ubuntu, Arch, Mint, Raspbian)

Tools: Git, Subversion, Intellij, Eclipse, Gradle, Ant, Maven, Android Studio, PHPStorm,

XCode, RaspberryPi

### **Experience**

Ford Motor Company (TekSystems Inc.)
Connected Vehicle Platform & Products

July 2018 - Present

## Full-Stack Engineer

- Developed, tested, and maintained a B2B API used by Ford's external business customers that involves receiving, storing, and delivering telematics data from vehicles (Java, Spring Boot, Microsoft Sql Server, JSON, Azure, PCF)
- Developed, tested, and maintained a notification service to instantly deliver status notifications to external business customers (Java, Spring Boot, Azure ServiceBus, PCF)
- In-vehicle testing and debugging of the full B2B product involving configuring and flashing embedded modems firmware using CAN tools and receiving, storing, analyzing, and delivering telematics data
- Designed and developed a Testing Framework that utilizes test hardware to test data being streamed from a vehicle's TCU module (Java, Spring Boot, Python, RaspberryPi, Azure EventHub)
- Agile development process

CNSI (Client Network Services Inc.)

May 2015 – July 2018

# Software Engineer

- Developed, tested, and supported a client facing site for analyzing a large volume of system analytical data (Java, Spring, Struts, Oracle DB, PL/SQL, JBoss, HTML/CSS/JavaScript)
- Developed and supported a REST and SOAP web service application to automate the tracking and notification of compliance of several hundred service-level agreements (Java, Spring, Oracle DB, REST, SOAP, Apache CXF)
- Designed, developed, tested, deployed, and supported an internal operations portal site to eliminate paper processes and automate an approval workflow (Java, Spring MVC, Hibernate MySQL, Apache Tomcat, Linux Server, HTML/CSS/JavaScript)
- Designed, developed, tested, deployed, and supported an internal financial management portal to phase out outdated excel processes (Java, Spring MVC, Hibernate, MySQL, Apache Tomcat, Windows Server, HTML/CSS/JavaScript)
- Mentored and trained interns

# MSU Senior Capstone Project

Fall 2015 Senior Year

- East Lansing, MI
  - Partnered with Ford Motor Company on a project to build a Connected Vehicle Protocol Test Harness and Evaluation Tool for comparing raw performance of M2M protocols
  - Designed and developed a modular test harness to run on simulated TCU module hardware that would allow for any M2M protocol to be tested – developed MQTT, AMQP, and RESTful HTTP components to plug into test harness
  - Setup RabbitMQ message broker on Windows Server 2012 to be messaged by test harness
  - Created web interface for analyzing aggregated and averaged transmission data
  - Co-lead a team of 5 students

MSU IT Services

September 2014 – May 2015

East Lansing, MI

User Interface Developer

- Front-end development on several widely used student account applications
- User Acceptance Testing of several applications

#### Education

Michigan State University
East Lansing, MI
Bachelor of Science in Computer Science
Cognate: Business

September 2012 - May 2016

## **Personal Projects**

- www.ajbergman.com My personal website
- www.fortyeight.club A complete social network. The backend is PHP in an MVC design, with a MySQL database (decommissioned)
- TheseBeats App A social music sharing Android app (decommissioned)