

michael@mikeryankelly.com



### **EXPERIENCE**

# Software Engineer

**KELLY** 

### August 2012 to Present • Aviture Inc. • Omaha, NE

**MICHAEL** 

- Worked on the RIAC Modernization Program and helped prototype a modern web application for visualizing nuclear strike options. Utilized numerous new and emerging open source technologies, frameworks, and specifications including HTML5, CSS3, Node, Express, Mongo, Redis, Backbone, WebGL, and WebSockets.
- Designed and deployed the entire company IT infrastructure. Built physical hosts using inexpensive, low power, and commodity components. Utilized VMWare ESXi and vCenter to establish a virtual computing environment that allowed for cost effective allocation of physical resources.
- Developed a real time geospatial collaboration application utilizing Node, Express, SocketlO, and Leaflet. The finished application allowed users to collaborate, draw, and annotate on the same geospatial canvas with near realtime synchronization over a WebSocket connection.

## Systems Integration Engineer

### May 2008 to August 2012 • Lockheed Martin • Papillion, NE

- Utilized multiple tier web application systems and development environments working on the Integrated Strategic Planning and Analysis Network (ISPAN). ISPAN is used by the Department of Defense to perform deliberate and adaptive planning, strategic, nuclear and non-nuclear planning and analysis.
- Virtualized the ISPAN system architecture using VMware vSphere and vCenter. Engineered and implemented the infrastructure design required to cluster the ISPAN application.
- Designed and developed an automated and fully scalable system to deploy application code across a virtual cluster based infrastructure. This system reduced total deployment time by approximately 83%.
- Worked on the ISPAN backup and recovery project (BAR) that allowed for near instantaneous recovery of the entire system using multiple geographically separated standby systems.
- Developed and implemented a fully redundant, highly available, and virtualized development environment.

# Freelance Software Developer

#### March 2010 to Present • Omaha, NE

- Designed and implemented the web service, database schema, data model, PDF export, and imaging components for Publications (www.publicationsapp.com) using the Play! Framework.
- Assisted in the development of the Ubuntu Linux distribution and related open source projects through Launchpad.
- Continue to support, develop, and volunteer for other open source projects part time.

## Undergraduate Teaching Assistant

## December 2010 to May 2011 • University of Nebraska • Lincoln, NE

- Supervised a myriad of academic activities to include laboratory instruction, assignment development, and grading.
- Conducted individual mentoring and feedback sessions with students, and maintained regular office hours.
- Specifically supported Dr. Usha Chandra, Dr. Byrav Ramamurthy, and Dr. Charles Riedesel for Computer Science II (Java Programming) as well as MATLAB Programming.

# Bachelor Of Science In Computer Engineering

### May 2011 • University of Nebraska • Lincoln, NE

- Awarded 2nd place in the UNL Engineering Week Senior Design Competition.
- Awarded 2nd place in the Institute of Electrical and Electronics Engineers Region 4 Senior Design Competition.
- Received undergraduate teaching assistant Certificate of Appreciation from the Department of Computer Science and Engineering.

#### **CERTIFICATIONS**

# DoD Security Clearance

## May 2008 to Present • United States Department of Defense

• Cleared by the United States Department of Defense to handle Secret Compartmentalized Information in addition to material with Top Secret classification.

#### SKILLS + TECHNOLOGIES

