

# AUSTIN JAMES BULLARD

austinbullard@pm.me  
linkedin.com/in/austinbullard

(515) 257-0099  
github.com/abullard

## Employment History

### **Software Consultant** April 2021 - Present

**Lean TECHniques**, Software Consulting for Greater Des Moines

- Consulted with agricultural statisticians to develop monitoring tools to optimize crop harvest yield
- Implemented R script generator, providing users with instant harvest analysis scripts
- Introduced automated trial design, saving users ample time on trial creation
- Migrated AWS infrastructure from EC2 to ECS resulting in a reduction of deployment time by 50%
- Consumed new OAuth API to fetch selected field data, drastically reducing cached data and network traffic

### **Software Engineer II** June 2018 - March 2021

**Blue Canyon Technologies**, Small Satellite Manufacturer

- Designed, built, and consumed mission operations software for space vehicle command and control from qualification testing to flight
- Built infrastructure for autonomous command & control of missions with multiple space vehicles
- Automated qualification testing for software defined radios, increasing speed by 4x
- Interfaced with numerous hardware devices to automate qualification testing of various spacecraft components
- Introduced template engine to front-end, decreasing repository footprint by 25%

### **Software Engineering Intern** 2017

**Cerner Corporation**, Healthcare Systems

- Introduced development and staging environments for a greenfield application
- Dockerized application for deployments to development and staging environments through Apache Mesosphere

### **Software Engineering Intern** 2016

**Berkley Technology Services**, Insurance Solutions

- Added automated gherkin test coverage for 50% of front-end application code
- Utilized web hook to display automated test results daily, ensuring production builds stayed green
- Implemented Google Analytics to measure user engagement with system features



## Personal & Academic Projects

### **Gameboy Advanced ROM** 2023

Developed an interactive scene utilizing C. This project taught me how powerful C is for high performance in limited hardware. The ROM is based on my cat, Filbert who's decided it's time for catnip.

### **Iron Tower** 2018

Created a multi-level, single-player virtual reality game where players battle monsters as they ascend a tower. I lead development on a team of six by delegating tasks, cleaning up our demos, and writing the motion controls for gesture based spell casting with the HTC Vive controllers. Written in Unity with C# and Steam's Vive API.

### **Kame House** 2017

Developed a scene written in JavaScript's ThreeJS library for my computer graphics class in school. I used trigonometry and UV mapping to simulate ocean wave movement. I then used normal map vectors to reflect the skybox and sun off the water's surface.

## Education

### **Iowa State University** 2018

Bachelor of Science in Computer Science

## Technical Skills

### **Languages & Libraries**

React (TypeScript)  
DotNet  
NodeJS (JavaScript)  
PostgreSQL  
Ruby  
Mocking/Stubbing

### **Process Management**

Version Control Software  
Agile  
Test Driven Development  
IntelliJ products  
Pair Programming

### **Interests**

Artificial Intelligence  
Machine Learning  
Augmented Reality  
Virtual Reality  
Functional Programming