# Brandon **Manke**

COMPUTER SCIENCE MAJOR

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## Work Experience

**State Farm** *Bloomington, IL*

SOFTWARE DEVELOPER INTERN *May 2018 - Present*

- Working in an agile environment developing web services to support State Farm agents.
- Improved team's productivity by introducing beneficial Git practices.
- Improved modularity of code by decoupling database wrapper from SOAP API to its own web service.

**Freelance** *Chicago, IL / Remote*

FULL STACK ENGINEER *April 2016 - May 2018*

- Implemented RESTful APIs written in Node.js and Express.
- Utilized Mongoose to write schemas for a NoSQL database (MongoDB).
- Created and deployed web applications for clients.

## Education

**Illinois State University** *Normal, IL*

B.S. IN COMPUTER SCIENCE *Aug. 2016 - May 2019*

- Cumulative GPA: 3.84/4.00
- Dean's List Spring 2017, 2018
- Member of Competitive Programming Club
- Member of Mobile Development Club

## Projects

**CSGO Clicker**

JAVASCRIPT, NODE.JS, REDIS, MONGODB, EXPRESS, WEBSOCKETS, DOCKER, DOCKER SWARM

- Scaling backend services to account for 40-50k monthly users.
- Designing RESTful APIs with Node.js and Express.
- Utilizing WebSockets to build efficient event based API between client and server
- Modeling document schemas with MongoDB for optimal database performance.

**Destiny 2 API Wrapper**

JAVASCRIPT, NODE.JS, JEST, TRAVISCI

- Implemented an API wrapper in Node.js for the popular video game Destiny 2.
- Collaborated with Bungie to improve the accessibility of their API.
- Deployed project with automated tests and builds using TravisCI.
- Improved unit testing skills and broadened understanding of Test-Driven Development.

**Graph Algorithm Visualization**

JAVASCRIPT, HTML, CSS

- Created a website that visualizes the Nearest Neighbor Algorithm on randomly generated graphs.
- Utilized Cytoscape.js library to visualize and draw interactive graphs in HTML5 Canvas.
- Applied knowledge of graph theory to better understand advanced algorithms and the application of graph theory in computer science.

**Smart Mirror Raspberry Pi Project**

JAVASCRIPT, NODE.JS, HTML, CSS

- Built a smart mirror interface configured with Amazon's Alexa voice assistant.
- Wrote a web server in Node.js to utilize news, weather, and Google Calendar APIs.

**Safe Stroll Android App**

JAVA, GRADLE, ANDROID

- Built an Android app that helps people get home safely, by alerting contacts if user is not responsive.
- Collaborated with classmate to design android app for Mobile App Development contest.

## Skills

**Web Development:** JavaScript • Node.js • HTML • CSS • Express • Vue.js • Webpack • Redis • MongoDB

**Programming Languages & Tools:** Java • C++ • Go • Jest • JUnit • Git • Docker