

# Colin Banigan

## SOFTWARE ENGINEER

📡 cbanigan.github.io

✉ colinbanigan@gmail.com

☎ (972) 890-7420

Developer and designer looking to create easy-to-use and effective software experiences.

## EDUCATION

### Georgia Institute of Technology

*M.S. in Computer Science*

Specialization in Interactive Intelligence

Expected Graduation: Spring 2021

OMSCS Program (online)

Overall GPA: 4.0

### Texas A&M University

*B.S. in Computer Science*

Minors in Art and Cyber Security

Certificate in Business Management

Overall GPA: 3.57

## SKILLS

### Languages

Java • Python • C • C++ • JavaScript

TypeScript • HTML • CSS

MATLAB • SQL

### Operating Systems

MacOS • Windows • UNIX • Android

### Front-End

Angular • React • Vue.js • SASS

D3.js • Sketch • Adobe Suite

### Back-End

Spark • Flask • Spring Boot • Behave

Node.JS • JMeter

### Databases

PostgreSQL • Cassandra • Redis

### Tools

Docker • Jenkins • Git • Vim • Bash

Microsoft Office • Google Suite

### AI/ML

Keras • H2O • Matplotlib • Pandas

Numpy • SciKit Learn • Jupyter

### Cloud

AWS (Certified Solutions Architect)

## EXPERIENCE

### Capital One - Plano, TX

*Associate Software Engineer | 2018 – Present*

Currently working as a software engineer in Financial Services. Helped re-engineer the data pipeline from on-premise to the cloud (AWS). Work includes distributed computing for data load, transformation, and validation (PySpark + AWS EMR + S3 + Snowflake), full-stack web development (Angular + Java Spring Boot/Python Flask + PostgreSQL), autonomous deployment on an internal CI/CD pipeline with unit, integration, and performance tests (Docker + Jenkins + Python Unittest + Behave + JMeter), and machine learning data analysis (Python + H2O).

### Capital One - Plano, TX

*Software Engineering Intern | Summer 2017*

Full-stack development intern within the Home Loans Department. Fully integrated a history timeline feature as its own microservice in the main Home Loans servicing application to improve internal agent's knowledge of the current customer's previous problems. Project included creating a user interface (Angular), writing an orchestration layer (Java Spring Boot), and retrieving data from a NoSQL database (Cassandra).

### HCI@Viz - College Station, TX

*Undergraduate Researcher | 2016 – 2018*

Researcher and developer within the HCI@Viz lab underneath both The StoryLab and The INDIE Lab. Primary research focused on informal science education through Android Wear smart watches that resulted in two major ACM conference publications. Secondary research compared and contrasted different types of movement within virtual reality relative to users spatial awareness as well as sickness.

## PUBLICATIONS

Moghadam, K., **Banigan, C.**, Ragan, E. (2018). Scene Transitions and Teleportation in Virtual Reality and the Implications for Spatial Awareness and Sickness. *Published in IEEE Transactions on Visualization and Computer Graphics (Early Access)*.

Garcia, B., Chu, S., Nam, B., **Banigan, C.** (2018). Wearables for Learning: Examining the Smartwatch as a Tool for Situated Science Reflection. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (CHI '18)*. Paper No. 256.

Chu, S., Deuermeyer, E., Martin, R., Quek, F., Berman, A., Suarez, M., Zarei, N., Nam, B., **Banigan, C.** (2017). Becoming Makers: Examining "Making" Literacy in the Elementary School Science Classroom. *Proceedings of the 2017 Conference of Interaction Design and Children (IDC '17)*, p.p. 316-321.