

# Samantha Barrera

MATHEMATICS AND COMPUTER SCIENCE STUDENT SEEKING INTERNSHIP

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## Education

### University of Illinois at Urbana-Champaign

B.S. IN MATHEMATICS AND COMPUTER SCIENCE

Jan 2017 - Exp. May 2020

Urbana-Champaign, IL

– Computer Science Coursework:

Data Structures • Computer Architecture • Interactive Computer Graphics • Discrete Structures • Software Design Studio • Introduction to Computer Science

– Mathematics Coursework:

Applied Linear Algebra • Calculus I - III • Fundamental Mathematics

## Work Experience

### Capital One

SOFTWARE ENGINEER INTERN

May 2018 - Aug 2018

Champaign, IL

- Worked under Capital One's Purple Rain division - Capital One's big data warehouse for their cyber machine learner division.
- Containerized Purple Rain's data streaming applications using Docker, Kubernetes, Minikube, and Ansible onto their EC2 instances.
- Familiarized myself with Kafka, Zookeeper, and Spark - these were the applications that Purple Rain needed to be containerized.

### Engineering IT

STUDENT CONSULTANT

Aug 2017 - Dec 2017

Urbana-Champaign, IL

- Helped consult and fix IT issues within University of Illinois' College of Engineering.
- Some daily tasks included re-imaging computers, setting up and configuring WiFi, fixing and refilling printers, and renting out laptops and cables for university staff members and students.
- Recorded in-person lectures for online use for the College of Engineering.

## Projects and Extracurriculars

### Friendule

[HTTPS://GITHUB.COM/SLBARRERA/FRIENDULE](https://github.com/slbarrera/friendule)

May 2018 - Aug 2018

- An iOS application that allows you to easily plan outings with your friends and family by syncing schedules.
- Friendule takes into account everyone's schedule by looking at conflicts and preferred hangout times and then finds the perfect time for everyone to get together.

### Game Builders

MEMBER

Aug 2017 - Present

Urbana-Champaign, IL

- Collaborate with other students who are interested in game design and development.
- Compare and work on projects together in and outside of meetings.
- Work through various tutorials together to better video game development and design skills.

## Skills and Interests

**Proficient** Java • C++ • Python

**Familiar** HTML/CSS • Swift • Assembly • JavaScript

### Tools and Technologies

Android Development • iOS Development • Git • SQL • Google Firebase • AWS • Docker • Ansible • Kubernetes • Minikube • Kafka • Zookeeper • Spark

**Other** Complete Microsoft Suite • Graphic Design • Video Editing • Customer Service

**Interests** Video Games • Theatre • Cooking • Food • Music • Traveling