EMILY NGUYEN

github.com/nEmily emilyn@berkeley.edu
linkedin.com/in/nguyen-emily/ (916) 753-2847

EDUCATION

B.A. in Computer Science **University of California, Berkeley** **Grad: Summer 2020**

Relevant Coursework:

- Data Structures
- Computer Algorithms
- Databases
- Artificial Intelligence
- Virtual Reality
- Game Design and Development
- Computer Graphics
- UI Design and Dev
- Computer Architecture
- Computer Security
- Internet Architecture

SKILLS AND INTERESTS

Applications: Unity, Django
Programming: Java, Python, C#, C, C++, Golang, SQL, Scratch, Snap!
Website Dev: Familiarity with HTML, CSS, Javascript

EXPERIENCE

Code Coach, the Coder School Berkeley, Berkeley, U.S. **Jul. 2019 - Present**

- Teaching students ages 7-16 one-on-one or one-on-two to learn Scratch, Python, Java, or C#, and apply their knowledge towards problem solving, algorithm design, and project-building.
- Taught Scratch and Python in 9 one-week-long camps to 12-14 students aged 7-16, with each student developing a polished deliverable.

Academic Intern, University of California, Berkeley **Jan. – May 2019**

- Tutored students in an introductory computer science class: Structure and Interpretation of Computer Programs.
- Tested student knowledge in lab, and supported students with concepts and projects in office hours.

Software Development Intern, Lokafy, Toronto, Canada **Jun. – Aug. 2018**

- Developed a "QuickPay" payment system using the Stripe API, allowing employees to create transaction links on the fly to send to customers, and view transaction details.
- Designed front-end for both customers and employees based off of start-up's style guide, and developed using the Django framework, CSS, and HTML.
- Developed back-end system with SQL and Python to connect with Stripe API and record and display transaction details.
- Documented code and outlined usage of the program.

PROJECTS

Crowd Simulation **2020**

- Unity and C#: Developed a crowd simulation on a busy intersection, implementing stoplights, pedestrians, and crosswalks, using the NavMesh system and NavMesh AI.

VR Game: Escape Room **2020**

Unity3D, C#, VR: Developed an interactable escape room complete with multiple minigames using OculusVR.

Localized End-to-End Encrypted File Sharing System **2019**

- Golang: Designed and implemented a localized file sharing and editing system that protects user privacy.
- Features a stateless client, symmetric and asymmetric encryption, HMACs, and digital signatures.

ArkAngel **2018**

- Unity and C#: Developed a 2D top-down adventure-fantasy role playing computer video game.
- Implemented UI, dialogue branching, player movement, control system, and minigames.

Killer Boba | 48-Hour Hackathon **Nov. 2018**

- Unity and C#: Developed an iOS mobile game about a boba character attempting to escape a straw.
- Implemented player touch screen control, collision physics, and enemy boba/cup/straw mechanics

Mini-Git **Nov. 2017**

- Java: Created a local version-control "git", including development of commits, branches, checking out, and branch merging.

Mini-DBMS **Sep. 2017**

- Java: Created a simple relational database management system with a query language similar to SQL.