

EMILY NGUYEN

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nemily.github.io

EDUCATION

Bachelor's in Computer Science	University of California, Berkeley	Grad: Summer 2020
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Relevant Coursework:

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

SKILLS AND INTERESTS

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

EXPERIENCE

Code Coach , the Coder School, Berkeley, U.S.	Jul. 2019 - Present
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- 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.
- Projects I mentored in include: infinite-level platformers, 3D platformers, VR cooking sim, and more!

Virtual Reality Course Facilitator , University of California, Berkeley	Jan. – May 2020
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- Taught in a class for Berkeley undergraduate and graduate students about development for VR in Unity using C#, as one of a team of student facilitators.

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

PROJECTS

Crowd Simulation	2020
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- 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
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- Unity3D, C#, VR: Developed an interactable escape room complete with multiple minigames using OculusVR.

Localized End-to-End Encrypted File Sharing System	2019
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- 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
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- 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
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- 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
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- Java: Created a local version-control "git", including development of commits, branches, checking out, and branch merging.