VIVIEN NGUYEN

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EDUCATION

University of California, Berkeley

Computer Science, B.A.

Expected Graduation: May 2019

Current GPA: 3.58

WORK EXPERIENCE

Software Tools Infrastructure Architect Intern

Santa Clara, CA (Jun - Aug 2018)

NVIDIA, Hardware Performance Infrastructure

- Iterated on tools to enable various teams performance analysis of future and current chips
- Enhanced a tool responsible for collecting GPU performance monitor data, to secure it for use by external customers
- Prototyped a workflow to increase visibility into different sections of raytracing workload

Software/DevOps Engineering Intern

San Francisco, CA (Jun - Aug 2017)

Braintree (PayPal), Cloud Infrastructure

- Built and maintained AWS-based platform with reduced cost and service latency for Braintree's new cloud services; platform is currently authorizing live transactions from major enterprises
- Developed tooling used by multiple dev teams to scale their own services on this platform, including monitoring to alert for failing pieces of infrastructure

Undergraduate Student Instructor

Berkeley, CA (Aug 2017 - present)

UC Berkeley EECS Department

• Computer Graphics (Sp18, future Sp19), Networking (Fa18), Data Structures & Algorithms (Fa17)

ACTIVITIES

Director, Pioneers in Engineering

Berkeley, CA (May 2017 - May 2018)

https://pioneers.berkeley.edu, a UC Berkeley nonprofit that hosts a robotics competition and other outreach events for local Bay Area high school students to promote STEM education

- Defined short and long term goals and vision of the organization; lead 60+ staff members across 12+ engineering, education, and operational projects
- Maintained partnerships with alumni, corporate and university contacts, high school teachers
- Managed a \$60,000 budget, one of the largest of any student organization at Berkeley
- Former PM of Web Development, and current advisor to the organization

PROJECTS

CS 184 (Intro to Computer Graphics) Projects

- Ray Tracer Physically based rendering program based on path-tracing algorithms
- Rasterizer Supersampling, hierarchical transforms, anti-aliased texture mapping
- MeshEdit Includes support for Bezier curves and surfaces, Loop subdivision, shaders
- ClothSim Real-time cloth simulation program using mass and spring system

The Duel – created a 30-second 3D animated short as the project manager with a team; worked on modeling, materials, lighting, and post-production editing

SKILLS & INTERESTS

Technical Skills: Java, Python, C++, Bash, Autodesk Maya, Adobe Suite, HTML, CSS

Familiar With:C, Unity, Pixar Renderman, AWS, Terraform, Ansible, Cassandra, JavaScript **Relevant Classes:**Computer Graphics, Data Structures, Machine Structures, Algorithms, Linear

Algebra, Discrete Math & Probability, Operating Systems, Networking, Artificial

Intelligence, Art History of Interactive Media

Interests: Computer graphics, rendering, game engines and game development, infrastructure

& architecture, DevOps, UI/UX, STEM outreach, digital humanities, art