Angela Montemayor

214-435-3555 | amontema@cs.stanford.edu | linkedin.com/in/angela-montemayor | github.com/angelamontemayor

EDUCATION

Stanford University Sep 2021 – Jun 2023
Master of Science in Computer Science *Stanford, CA*

Stanford University Sep 2016 – Jun 2020
Bachelor of Science in Computer Science, Minor in Creative Writing *Stanford, CA*

RESEARCH EXPERIENCE

Graduate Research Assistant Jan 2022 – Present
Stanford University, PI: Keith Winstein *Stanford, CA*
- Developing Fixpoint, a functional operating system that aims to change the way customers interface with the cloud
- Implemented module instancing for the WebAssembly Binary Toolkit (WABT), to allow for the same Fixpoint module to be executed in parallel across different cores. Feature was contributed to the upstream project
- Co-designed and implemented the Fixpoint API, and streamlined its usage of WebAssembly
- Designed and implemented the Flatware layer of Fixpoint, allowing for Fixpoint programs to make traditional POSIX system calls

Undergraduate Research Assistant Jun 2019 – Mar 2020
Stanford University, PI: Kayvon Fatahalian *Stanford, CA*
- Worked on Scanner, a Video Database Management System that processes video material quickly and at scale
- Developed a suite of benchmark performance queries for Scanner to evaluate video processing runtimes, and identified decode-bound limitations in other field benchmarks
- Identified missing functionality in Scanner's autoscheduling procedure and evaluated impacts to system reliability

PUBLICATIONS

Computation-Centric Networking

Yuhan Deng, Angela Montemayor, Amit Levy, and Keith Winstein. *ACM Workshop on Hot Topics in Networks*, 2022.

INDUSTRY EXPERIENCE

Software Engineer Jul 2020 – Aug 2021
Xage Security *Palo Alto, CA*
- Member of the Distributed Systems team at blockchain-based IoT security startup
- Designed and implemented a new API to batch transactions submitted to the blockchain ledger, significantly improving performance
- Designed and implemented a new Time Sync service which eliminated concurrency bugs and streamlined deployments

Software Engineer Intern Jun 2018 – Aug 2018
Autodesk *San Francisco, CA*
- Member of the Forge Platform and Components team
- Performed a technical evaluation of a Multi-Factor Authentication (MFA) Service
- Architected integration of new MFA service into current cloud services

LEADERSHIP AND SERVICE ACTIVITIES

Tutor Nov 2022 – Present
College Track *East Palo Alto, CA*
- Tutoring underserved, high-priority high school students in mathematics, largely in Trigonometry, Algebra II, and Pre-Calculus
- Providing support and guidance to high school seniors in the college admissions process

Academic Director Sep 2018 – Jun 2019
Society of Latinx Engineers (SOLE) *Stanford, CA*
- Facilitated weekly Study Night events in coordination with other diversity societies to provide tutoring and course resources to SOLE members
- Organized faculty dinner for SOLE members to interact with engineering faculty and secure research positions