GEORGE

(916) 813 – 5390 | george.k@gatech.edu

EDUCATION

University of California, Berkeley
Class of 2016

Bachelor's, Computer Science

Developed diverse projects such as secure file sharing, stereograms, and inverse kinematics
Specialized upper-division studies in systems, computer graphics, and networking
Worked as a Lab Assistant for the *Machine Structures* course

Georgia Institute of Technology
Aug. 2018 – present

Master's, Computer Science

Studying ideas in computer vision, educational technology, and the applications of AI

PROFESSIONAL EXPERIENCE

Microsoft Corporation
Aug. 2016 – 2018

Software Engineer — Software-Defined Networking

Contributed to HNS, the native virtual network manager in Windows
Added IPv6 support and a multi-threaded notification system to react to external events
Implemented and officially documented Kubernetes alpha support for shared pods on Windows
Added versioning support for seamless transitions of service data between Windows upgrades
Developed a public cloud network policy provisioner for Azure-based systems

Sony Network Entertainment Int'l.
Apr. 2013 – Aug. 2014

Software Engineer — Test Automation Infrastructure, Intern

Interfaced with Selenium to automate testing on the PlayStation® 4
Ported over-the-network firmware upgrades into a cross-platform Python toolkit
Created a multi-threaded network service to facilitate distributed testing
Maintained and improved unit test stability and performance for the PlayStation Store®

CE Resource, Inc.
May 2015 – Aug. 2015

Software Engineer — Full-Stack, Intern

Developed back-ends with a variety of toolkits for both internal and customer-facing websites
Queried PostgreSQL databases to efficiently process large quantities of data
Styled and designed front-ends using both XSLT and HTML5 suites
Independently implemented and integrated a customer-facing standalone survey site
Facilitated test-driven development using tools such as Django's `unittest` framework

NOTEWORTHY PROJECTS

Cicada, *a peer-to-peer distributed networking framework*

Python networking framework designed to provide optimal routes with DHTs
Designed for distributing data efficiently and anonymously in a decentralized manner
Features a well-documented API and includes samples like a serverless IM client

Zenderer, *a 2D OpenGL game development framework*

A C++ framework enabling rapid game prototyping, also ported to JavaScript w/ WebGL
Applied it to create a 2D puzzle-platformer and a peer-to-peer real-time strategy game
~18,000 lines of code, including meticulous Doxygen documentation

PROFESSIONAL INTERESTS

Undying passion for P2P and decentralized networking, as well as trustless architectures
Study of consensus algorithms, zero-trust protocols, and other modern cryptographic principles
Exploration of developing multiplayer, cross-platform puzzle and strategy games
Interest in the potential of public blockchains beyond just currency