

GEORGE

george.k@gatech.edu

EDUCATION

Georgia Institute of Technology

Computer Science, M.S.

Expected Spring 2020

Computational Perception & Robotics

Broadening my horizons into computational photography, machine learning, and more

Published a series of comprehensive notes on [computer vision](#) and [ML for trading](#)

Reinforced and deepened my understanding of operating systems and cryptography

University of California, Berkeley

Computer Science, B.A.

Class of 2016

Computing Systems & Graphics

PROFESSIONAL EXPERIENCE

Strivr

Summer 2019

Software Engineer — Virtual Reality, Graduate Intern

Improved UI consistency, working closely with designers to implement their wireframes in Unity

Integrated a “review mode” into our training experiences for easy in-headset navigation and QC

Ensured compatibility across a both desktop and mobile VR devices (the Oculus Rift and Go)

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.

Summer 2015

Software Engineer — Test Automation Infrastructure, Intern

Interfaced with Selenium to automate testing and QA on the PlayStation® 4's Store

Ported the PlayStation's remote firmware upgrade protocol to a cross-platform Python toolkit

Created a multi-threaded network heartbeat service to facilitate distributed testing

CE Resource, Inc.

Apr. 2013 – Aug. 2014

Jr. Software Engineer — Full-Stack

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

NOTEWORTHY PROJECTS

Beacon Platform, an Ethereum-backed messaging platform

(unreleased)

A centralized messaging platform that eliminates necessity for platform trust

Uses modern cryptographic techniques like the Signal protocol to ensure message privacy

Automates out-of-band identity verification to ensure the authenticity of endpoints

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](#), a visualizer, and sample programs like a serverless IM client

Zenderer, a 2D OpenGL game development framework

A rapid game prototyping framework, written in C++ and ported to JavaScript with WebGL

Applied to create a demo 2D puzzle-platformer and a peer-to-peer real-time strategy game

~18,000 lines of code, including meticulous Doxygen documentation and a [GitHub wiki](#)