GEORGE K.
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PROFESSIONAL EXPERIENCE

Stellar Development Foundation ⌇   *August 2020 – Present*
Software Engineer II — Platform

Working on the Horizon API server that powers the **Stellar blockchain** payment network
Writing performant, scalable, and maintainable **Golang**, **Python**, and **JavaScript** code
Improving scalability of a system that serves TBs of data at 10,000 requests per second
Maintaining ownership of the **TypeScript** SDK, including adding protocol features
Reviewing, advising on, and implementing Stellar protocol proposals
Authoring guides, blog posts, docs, and ecosystem standards

Georgia Institute of Technology   *August 2020 – Present*
Head Instructor Assistant — Applied Cryptography   *(course link)*

Providing instruction and facilitating learning for 120+ student cohorts in an online environment
Developing **cryptanalysis** challenges and publishing comprehensive course notes
Working closely with Dr. Alexandra Boldyreva to improve course quality

Strivr ⌂   *Summer 2019*
Software Engineer — Virtual Reality, Graduate Intern

Integrated a "quality control" mode into **VR** training experiences for easy in-headset navigation
Improved UI consistency, working closely with designers in converting wireframes to **Unity**/**C#**
Applied **photogrammetry** techniques on **Kinect** output to import real-world assets into VR

Microsoft Corporation ⊞   *Aug. 2016 – 2018*
Software Engineer — Software-Defined Networking

Contributed to HNS, Windows' native virtual networking manager written in **C++**
Established support for IPv6, initial support for **Kubernetes**, and a MT system event handler
Developed a public cloud network policy provisioner for Azure-based systems

Sony Network Entertainment Int'l. △○✕□   *Summer 2015*
Software Engineering Intern — Test Automation Infrastructure

Ported the PlayStation's remote firmware upgrade protocol to a cross-platform **Python** toolkit
Interfaced with **Selenium** and **Jenkins** to automate testing on the PlayStation® Store

CE Resource, Inc.
Jr. Software Engineer — Full Stack   *Aug. 2013 – Aug. 2014*
Software Engineering Intern   *Summer 2013*

Developed back-ends in both **PHP** and **Django** for internal and customer-facing websites
Independently designed, developed, and integrated a survey site used by thousands of customers
Queried **PostgreSQL** databases to efficiently process terabytes of customer data

EDUCATION

Georgia Institute of Technology   *2018 – 2020*
Master of Science in Computer Science   Computational Perception & Robotics (GPA: 4.0)

University of California, Berkeley   *2014 – 2016*
Bachelor of Arts in Computer Science   Computing Systems & Graphics (GPA: 3.4)

NOTEWORTHY PROJECTS

Beacon Platform, *an Ethereum-backed encrypted messaging platform*   (unpublished)

A centralized, yet trustless E2EE messaging platform based on the Signal Protocol that delegates
out-of-band identity verification to the **Ethereum** blockchain (**Qt**/**C++**/**Solidity**)

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

A networking framework designed to provide optimal routing (via DHTs) to massive P2P swarms
for decentralized, encrypted, and semi-anonymous data distribution (**Python**)