GEORGE KUDRAYVTSEV

(916) 813 – 5390 — george.ok@pm.me — LinkedIn

PROFESSIONAL EXPERIENCE

Strivr *Summer 2019*

Software Engineer — Virtual Reality

Integrated a "review mode" into training experiences for easy in-headset navigation and QC
Improved UI consistency, working closely with designers to implement their wireframes in **Unity**
Debugged and restored a custom network protocol for casting mobile VR units to the desktop
Ensured compatibility across both desktop and mobile VR devices (the Oculus product family)

Microsoft Corporation *Aug. 2016 – 2018*

Software Engineer — Software-Defined Networking

Contributed to HNS, Windows' native virtual networking manager written in **C++**
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 across 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

Ported the PlayStation's remote firmware upgrade protocol to a cross-platform **Python** toolkit
Interfaced with **Selenium** to automate testing and QA on the PlayStation® 4's Store
Created a multi-threaded network heartbeat service to facilitate distributed testing via **Jenkins**

CE Resource, Inc. *Apr. 2013 – Aug. 2014*

Jr. Software Engineer — Full-Stack

Developed back-ends in **PHP** and **Django** for both internal and customer-facing websites
Independently implemented and integrated a standalone survey site used by 1000s of customers
Queried **PostgreSQL** databases to efficiently process terabytes of customer data

EDUCATION

Georgia Institute of Technology *Spring 2020 (4.0 GPA)*

Master of Science in Computer Science *Computational Perception & Robotics*

Developed a pipeline to transform football footage into interactive VR simulations
Explored ideas in machine learning, computer vision, robotics, and finance
Deepened my understanding of cryptography, operating systems, and algorithms
Published a series of comprehensive, LaTeX-typeset notes on these topics to reinforce knowledge

University of California, Berkeley *Spring 2016 (3.3 GPA)*

Bachelor of Arts in Computer Science *Computing Systems & Graphics*

NOTEWORTHY PROJECTS

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

A centralized messaging platform written in **Qt**/**C++** that eliminates the need for platform trust
Uses modern cryptographic techniques like the **Signal** protocol to ensure message confidentiality
Automates out-of-band identity verification in **Ethereum** for validating recipient authenticity

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

Python networking framework designed to provide optimal routes with DHTs
Designed for distributing data securely, 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