# btong@berkeley.edu github.com/bbtong btong.me

# BRYAN C. TONG

**EDUCATION** 

# University of California, Berkeley

Aug 2015 – May 2019

Bachelor of Arts, Computer Science

Focus: Spatial Computing, Cognitive Neuroscience

**EXPERIENCE** 

### **Pivotal Software**

June 2019 - Present

San Francisco, CA

Associate Software Engineer

- o Developed features in R&D tools to automate tasks via CI/CD, saving \$21M annually
- Created bot spanning multiple APIs to automate graceful shutdown behavior during network and power outages, reducing platform downtime and need for paging
- Contributed open-source code to BOSH, Cloud Foundry to improve handling of expiring certificates, assisting in easier orchestration of Cloud Foundry applications

# Augmented Cognition Lab / Robotics Learning Lab

May 2018 - Aug 2018

Software Engineer / Researcher

Berkeley, CA

- Directed R&D and engineers to implement MVPs with Unity, C#, Go, Ruby, ROS, in order to accelerate development on tele-operated robotics piloted via HTC Vive
- Contributed full-stack features including backend APIs and 2D & VR UI, enabling visual interfacing through HMD and traditional displays over wireless protocols

**Nokia Bell Labs** 

*May 2017 – Aug 2017* 

Software Engineering Intern

Sunnyvale, CA

- Developed mobile augmented reality applications with ARKit (day 0), Electron,
   React.js to project AR room-scale tele-conferencing avatars and indoor navigation
- Co-developed web client in React, Redux JS, d3, Electron, Socket.io, Docker to rapidly prototype a universal-integration chat and productivity application

#### **PROJECTS**

# Whitespace AR

Aug 2017 – June 2018

AR / VR Software Engineer

- Developed AR algorithm related to vertical wall tracking in ARKit beta / Xcode 10
- o Implemented light-normalized contrast detection to improve low-light tracking
- o Integrated iOS native app with **Shopify SDK**, **Firebase** with **Apple Pay** checkout

# **LEADERSHIP**

# **Virtual Reality at Berkeley**

*Aug 2016 – May 2019* 

President (Prior: Project Lead, 2016 – 2018)

Berkeley, CA

- Scaled to 120+ developers, 400+ members; grew revenue and donations 1,000%
- Organized VXPC and SodaHacks, Berkeley's largest VR conference and hackathon
- Established partnerships with Augmented Cognition Lab under Dr. Allen Yang,
   and Robotic Learning Lab under Dr. Pieter Abbeel, for VR robotic teleoperation
- o vr.berkeley.edu vr.berkeley.edu/sodahacks

# ADDITIONAL

CS 370 Head TA & Co-Instructor
ASUC Deputy Director of Entrepreneurship & Technology
CS 61A Course Staff, CS 61C Course Staff

Fall 2018 – Spring 2019 Fall 2018 Spring 2018