## **BRYON TJANAKA**

bryon@btjanaka.net · btjanaka.net · github.com/btjanaka · Santa Clara, California

#### **EDUCATION**

University of Southern California · Los Angeles, CA

Aug. 2020 - Present

Ph.D. Computer Science · National Science Foundation Graduate Research Fellowship · Advisor: Stefanos Nikolaidis

University of California, Irvine · Irvine, CA

Sept. 2017 - Jun. 2020

B.S. Computer Science (AI specialization) • GPA: 4.0/4.0 • ICS Honors • Regents' Scholar

**EXPERIENCE** 

Google, Inc. · Mountain View, CA

Jun. 2020 - Aug. 2020

Software Engineering Intern

Reduced Ads Serving costs by 4% by rearranging the query flow

Intelligent Dynamics Lab · UC Irvine (PI: Professor Roy Fox)

Oct. 2019 - Jun. 2020

Undergraduate Researcher

• Designed and tested a novel reinforcement learning algorithm using RLlib and PyTorch

Google, Inc. • Mountain View, CA

Jun. 2019 - Sept. 2019

Software Engineering Intern

Implemented, optimized, and evaluated multithreaded affinity clustering, a scalable clustering algorithm

**Mobley Lab** · UC Irvine (PI: Professor David Mobley, Graduate Mentor: Jessica Maat)

Oct. 2018 - Jun. 2020

Undergraduate Researcher

• Built a pipeline for selecting datasets from databases of millions of molecules

Google, Inc. · Mountain View, CA

Jun. 2018 - Sept. 2018

Engineering Practicum Intern

Developed and documented a tool to evaluate Google Assistant extensions by analyzing responses to 1000's of queries

## **LEADERSHIP & SERVICE**

## **USC Viterbi Graduate Student Association** · Los Angeles, CA

Aug. 2020 - Present

Webmaster

• Maintain vgsa.usc.edu and promote outreach events such as SoCal GPS

# ACM, UC Irvine Chapter

Sept. 2017 - Feb. 2020

Internal Vice President, Competitor

- Collaborated in teams to solve algorithm problems in ICPC, IEEExtreme, & Google Hash Code
- Organized campuswide competitions and semiweekly meetings to train other students to compete

## **PROJECTS**

## Neural Networks and Deep Learning Course Project: Bird Audio Detection

Apr. 2020 - Jun. 2020

• Led a team of 4 to analyze feature selection in bird sound detection with a PyTorch convolutional neural network

## HackUCI V Hackathon Project: Safeline (Best Entrepreneurial Hack award)

Feb. 2019

• Used Python, OpenCV, and a Raspberry Pi camera to detect people falling down and send iPhone alerts

# **SKILLS**

Languages: C/C++, Python, JavaScript, Java, SQL, Latex, HTML/CSS/Sass

Libraries/Frameworks: PyTorch, TensorFlow, Matplotlib, Dask, Singularity containers, pytest, Google Test, React.js, Jekyll

Tools: Vim, tmux, Git, Unix/Linux commands, Google Suite, Inkscape

Natural Languages: English (fluent), Mandarin (proficient)

#### **ADDITIONAL INFORMATION**

Champion of 2017 VEX Robotics High School World Championship • Speedcuber (solve Rubik's cube in <1 min)

Member of 2020 UCI Homecoming Court · Occasional Graphic Designer (btjanaka.net/personal)