

# BRYON TJANAKA

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## EDUCATION

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**University of Southern California** • Los Angeles, CA Aug. 2020 - Present  
Ph.D. Computer Science • 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

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**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

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**ACM, UC Irvine Chapter** Sept. 2017 - Feb. 2020  
Internal Vice President, Competitor

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

**Google Girl-Powered VEX Robotics Workshop** • Mountain View, CA Jul. 2017, Aug. 2018, Jun. 2019  
Speaker, Volunteer

- Introduced hundreds of middle school girls to VEX Robotics by helping them build and program their first robot

## PROJECTS

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**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

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

**Libraries and Frameworks:** PyTorch, TensorFlow, Matplotlib, pytest, Google Test, React.js, Jekyll

**Tools:** Vim, tmux, Git, Linux commands, Google Suite, Inkscape

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

## ADDITIONAL INFORMATION

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**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](https://btjanaka.net/personal))