

**WEBSITE**  
tyleryep.com  
github.com/tyleryep

# TYLER YEP

**CONTACT**  
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## EXPERIENCE

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### BRIDGEWATER INTERN

June 2019 – August 2019  
Full-Stack Developer

Created features for a domain-specific language built on Scala used to author investment logic. Created an Autotext feature to explain claims in financial reports and use new data to generate new reports. Used React.js and a custom Scala backend.

### INTUIT INTERN

June 2018 – September 2018  
Full-Stack Developer

Developed an automated UI test framework for Payroll teams. Designed reliable click/input functions using XPath selectors, integrated framework with Jenkins and backend service tests, and built a dashboard app to aggregate build results using React/Node.js.

### CS 198 SECTION LEADER

April 2017 – Present  
Stanford CS 106 Staff

Taught weekly sections of 10-14 students for CS 106A/B. Adapted specific lesson plans, attended weekly staff meetings & teaching workshops, graded student assignments and midterms, and held interactive grading sessions with students during the quarter.

### VIRTUAL REALITY LAB

September 2017 – June 2018  
VR Programmer

Created VR worlds for the Virtual Human Interaction Lab to use in PhD research. Implemented a multiplayer VR full-body experience using Unity, SteamVR, and Photon. Set up online VR studies using WebVR and Django to reach more participants.

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## PROJECTS

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### WOLFBOT

AI Game Player  
Python

Created AI that can win the popular game: One Night Ultimate Werewolf. AI Solver determines which players are lying using consistent statement subsets. Wolf AI players use Expectimax and Reinforcement Learning to choose the best lie to evade detection.

### SELF-DRIVING

Unity3D Simulator  
PyTorch

Trained a car simulator model to drive by taking in high-level controls (e.g. take the next available left turn). Used a branched ResNet architecture to predict throttle and steer angle. Successfully trained car to stay in its lane and complete turns in intersections.

### LANDMARK

Image Recognition  
PyTorch

Competed in the 2019 Google Landmark Recognition Challenge hosted on Kaggle. Placed 53<sup>rd</sup> using an Xception network combined with compact bilinear pooling and various forms of image attention to handle the few-shot learning problem.

### INSTAREACT

Mobile App  
React Native

Built a concept app using React Native and Expo that automatically scrolls through an Instagram-like feed and likes/dislikes photos for you based on your facial reaction to the photo, using Google Cloud API for facial recognition. Built during LA Hacks 2018.

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## EDUCATION

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### STANFORD UNIVERSITY

Class of 2020  
Computer Science B.S.  
GPA: 3.9

Relevant Coursework:

CS 110: Principles of Computer Systems, CS 161: Design & Analysis of Algorithms, CS 147: Human-Computer Interaction, CS 155: Computer Networking & Security, CS 224N/229/230/231N: Deep Learning, CS 246: Mining Massive Datasets

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## SKILLS

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HTML/CSS/JS  
Node.js, Express.js  
React/Redux  
Unity, Android Studio

Python  
PyTorch  
TensorFlow, Keras  
C++, Java, Scala

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## HOBBIES

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Fingerstyle Guitar  
Running  
Music Production  
Design Thinking