James Lyons

(757) 254-5186 * jlyons61@alumni.stanford.edu * https://jlyons6100.github.io/personalSite/

EDUCATION

Stanford University, Stanford, CA
Bachelor of Science in Computer Science, Human-Computer Interaction Track December 2018

- Relevant Coursework: Principles of Computer Systems, Web Applications, Data Visualization, Object-Oriented Systems Design
- GPA: 3.0/4.0

PROJECTS & PROFESSIONAL EXPERIENCE

Stanford University, Stanford, CA
Research Assistant, December 2017 - Present

- Created three surveys (Human Intelligence Tasks) using HTML, CSS, and Python on Amazon Mechanical Turk (MTurk) to gather training data for machine learning algorithms used to predict environmental conditions from images
- Surveys consisted of questions asking which of two images had better building conditions (Building conditions survey), less trash (Trash Survey), or better upkept frontage (Frontage survey)
- Surveys were used to obtain ~129,000 image pair ratings from 100 workers (MTurkers)
- Binary and Ternary Image Classification algorithms trained using this data were 70-80% accurate on out-of-sample tests
- Worked in a team of five, collaborated with additional MIT researchers

Stanford University, Stanford, CA
Programmer, Feb 2018 - June 2018

- Created a Web App using the MERN scaffolding tool that served the front-end UI in a Smart Mirror
- Developed Weather, Time, and Calendar widgets using CSS, HTML, and JavaScript
- Worked in a team of five for ten weeks using agile methodology
- Successful front-end, partially limited by hardware (Limited processing power of Raspberry Pi used for App).
- Implemented the following widgets Weather, Traffic, News Feed, Calendar, and Music Player
- Interface with widgets using iOS app

Stanford University, Stanford, CA
Programmer, Sep 2017 - Dec 2017

- Worked in a team of three to develop a Virtual Shopping Assistant App concept dubbed “Shoppy”
- Completed need finding to identify problems regular people face when shopping
- Created paper Low-fidelity prototype to identify potential problems with design
- Tested Low-Fidelity prototypes on a random selection of local shoppers
- Made a hi-fidelity prototype using Java, XML, and Android Studio in 10 weeks
- Successful App with minor bugs by final presentation to the public
- App provided users with items we recommended the user buy, items the user routinely buys, and reminders for items the user may have forgotten to purchase

SKILLS

- Java, JavaScript, SQL, C++, Software Development, HMTL, Cascading Style Sheets (CSS), Python, Git, Android Studio, Web Programming