# Brady Shi

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## Education

**University of California, San Diego**, *Bachelor of Science in Computer Engineering (Expected Jun 2017)*
- Cumulative GPA: 3.52/4.00
- Tau Beta Pi Honors Society

## Work Experience

**Lockheed Martin, Software Engineering Intern (Part-Time)**, *San Diego, CA (Oct. 2016 – Mar. 2017)*
- Designed and created an interactable timeline to monitor past and present command and control unit operations, using React, Redux, and vis.js
- Facilitated quick development as well as cross-browser compatibility through use of Gulp build system
- Developed a near-instantaneous state synchronization solution by utilizing WebSockets

**Lockheed Martin, Software Engineering Intern**, *San Diego, CA (Jun. 2016 – Sep. 2016)*
- Worked on a team to develop a Java solution to illustrate command and control unit analyses
- Improved algorithms and sped performance by up to 30x on state synchronization logic
- Enhanced flexibility of the program's state management; eventual migration to a new IDL required only 1 day
- Wrote a multi-threaded solution for asynchronously monitoring REST API and DDS data sources
- Assisted with demoing the project to LM clientele at the Lockheed Martin Center of Innovation

**Lockheed Martin, Software Engineering Intern**, *San Diego, CA (Feb. 2015 – Sep. 2015)*
- Saved weeks of potential manual documentation, by writing a Java program that leveraged Crucible's API to ensure that 100% of team's code had been code reviewed
- Became the go-to team reference for Mercurial and mocking API (JMockit) related queries and issues

## Projects

**bradyshi.com**, *React/Redux/ES6 Website, Node.js backend*
- Redux state management allows for efficient fetching and display of data from PostgreSQL database
- Cross-browser compatible on all major desktop browsers (Edge, Chrome, Firefox, Safari)

**Image Renderer**, *C++ Graphics Project*
- Renders 3D images given light sources, models, model materials, and model coordinates
- Path tracer handles multiple bounces, materials with differing BRDFs (e.g. Lambertian, Ashikhmin)
- Corrects aliasing through supersampling, as well as jittering and Shirley mapping

**Anchor**, *Android Project for UCSD Software Engineering course*
- Real-time discovery and geolocation of students looking for study groups
- Lead front-end Android developer on team of 10, as well as main presenter for project demo

## Skills

**Primary Languages**: Java, C/++, C#, Python, HTML/CSS/JavaScript

**Familiar with:** Android, React, Redux, AngularJS, Express, Gulp

**Tools:** Git, Mercurial, Vim, VS2015