# Contact

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| World | Portfolio [jsbass.com](http://jsbass.com/)  [github.com/jsbass](https://github.com/jsbass) |

# Skills

# Education

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| --- | --- |
| Aug 2013  – Aug 2016 | Bachelor of Science: Aerospace Engineering University of Oklahoma  3.0 GPA |
| Aug 2010  – May 2011 | Oklahoma School of Science & Mathematics Regional Center |

# Profile

After graduating with an engineering degree, I’ve spent the two years working as a software developer. I want to pivot back to aerospace and engineering while utilizing the experience I have gained as a software developer. I have multiple examples of self-motivation and try to my team better than when I arrived.

# Work

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| --- | --- |
| Sep 2016  - Present | OU IT – IT Studio IT Analyst II  Full stack web and mobile application development. Gained experience working as part of a team in an Agile development process, involved in tasks including: **development**, **QA**, **deployment**, and **support**. |
| Aug 2015  - Jun 2016 | OU IT – Learning Spaces Lead Technician  Student job leading team of peers and mentoring new employees. Gained experience with team organization and process improvement. |

# Experience

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| --- | --- |
| Summer 2019 | Labradorium Co-Owner and Primary Developer  Already I have developed the initial proof of concept technology to demonstrate the effectiveness of the idea. Currently I am working to expand the product catalog and make fundamental technology production ready. This involves full-stack web development, cloud hosting of infrastructure to minimize cost, and experience developing for foreign ecosystems with the Excel AddIn development. |
| Spring 2016 | OU Senior Capstone Chief Engineer  Capstone to design and build scale model Northrop-Grumman reusable spaceplane. The goals were for the model to be capable of rocket assent and autonomous airplane landing |
| Spring 2016 | Nonlinear Dynamical Systems & Control AME 4980  This course covered an introduction to nonlinear stability methods and basic control techniques such as state linearization and adaptive control. At the end, my team and I were given a project demonstrating backstepping with a quadrotor. |

# Awards

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| --- | --- |
| Ribbon | AP Scholar with Distinction College Board |
| Ribbon | Science & Engineering Fair US Army Award US Army Research Lab |
| Ribbon | Oklahoma Regents Scholar Oklahoma State Regents for Higher Education |
| Ribbon | OUIT Employee of the Month University of Oklahoma |
| Ribbon | Physics Journal Club Presenter University of Tulsa |

# Experience Cont’d

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| --- | --- |
| Fall 2015 | Dashboard Development for OU IT Self-Started Project for OU IT – Learning Spaces  Design and implementation of web based data source compilation and display. Self-proposed project approved by team lead for a modern, responsive interface with dynamic information loading. Gained experience creating system documentation and interdisciplinary experience with team members from various fields of study. |
| Spring 2014 | Embedded Systems AME 3623  Design and construction of an automated hovercraft with maze traversing. Gained experience with low-level programming of a microprocessor and functional programming with C. |
| Spring 2014 | Robotics Design Projects AME 4802  Implementation of Automated Systems to Perform Tasks Including: **Line Following**, **Maze Crawling**, **Identifying and Stacking Objects**, and **Object Recognition from Video Feed** |

# Projects

Personal projects with which I’ve been involved.

|  |  |
| --- | --- |
| Spring 2017 | OU Map Host removed. Rehost imminent.  **Completed**  Map of OU buildings and parking lots with quick click detection handled on the backend using a spatial partitioning tree. Contains features for editing the building details including the clickable building polygon on the map. |
| Fall 2017 | Labradorium (Private Source) <https://www.labradorium.com>  **Incomplete**  Book hosting and auto-grading assignment tools to facilitate learning in the classroom and ease the overhead of teaching large classes. I am one of two co-owners of the company. The source code is private as this is part of my company’s code. |
| Fall 2015 | 2D Airfoil Analyser <http://jsbass.com/stuff/JavaScript/Aero/JS_Foil.html>  **Incomplete**  Client-side app that uses a Vortex-Panel method to calculate forces on a 2D airfoil. Only graphing library and functions to convert NACA airfoil numbers to cartesian equations. Put on hold for school. |