# Contact

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| --- | --- |
| Marker | Address 11601 Country Dr  Oklahoma City, OK |
| Receiver | Phone 918.533.5034 |
| Envelope | Email [seabass992@gmail.com](mailto:seabass992@gmail.com) |
| 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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| --- | --- |
| Jun 2020  - Present | The Boeing Company Systems Engineer  Model-Based Systems Engineer working on the re-engine program for the B-52. Used software experience, to reinforce the Agile/Scrum process and to aid in model development and analysis with Cameo. |
| Sep 2016  - Jun 2020 | OU IT – IT Studio IT Analyst II  Full stack application development. Gained experience working as part of a team in an Agile development process. Involved in tasks including **development**, **QA**, **deployment**, **reliability**, and **support**. |

# Experience

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| --- | --- |
| Nov 2020  - Mar 2021 | MIT xPro Systems Engineering Course Architecture and Systems Engineering: Models and Methods to Manage Complex Systems  Continuing education in systems engineering, MBSE, and more generally MBE. Learned about model usage in a system engineering concept and gained insight into non-technical system management perspectives. |
| Summer 2019 | Labradorium Co-Owner and Primary Developer  Developed functioning product but, business has been put on hold due to time constraints. This involves full-stack web development, cloud hosting of infrastructure to minimize cost, and experience developing for foreign ecosystems with the Excel Add-In 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 |

# 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

|  |  |
| --- | --- |
| 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. |
| 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. |

# 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. I need to rebuild the database and subsequent connections in order to rehost this application. |
| 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 Analyzer <http://jsbass.com/stuff/JavaScript/Aero/JS_Foil.html>  **Mostly Completed**  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. Mostly done. |