

## Education

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University of Michigan, College of Engineering  
**B.S.E. in Computer Science Engineering**, Math Minor  
GPA: 3.79/4.00

April 2017

## Programming Languages

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Highly Proficient: C++, Python, C#, C, JavaScript  
Experience with: SQL, Swift, Bash, Make, Java, MATLAB

## Relevant Projects

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<https://github.com/buechechristian>

### Personal

Unnamed iOS Mobile App

- › Developing in Swift, utilizing social media principals to leverage participation and interaction

### The Boeing Company

Active Directory Admin Tool (ADAT)

- › Developed new, user-centric front-end for deployment of web application to entirety of the enterprise, with an estimated minimum cost saving of \$500,000 over the first 5 years
- › Added features including Amazon-like single search bar, filtering, result table modifications to production directory system, downloadable search results

Application Database Services (ADS) website

- › Designed, coded, and implemented a new customer-facing website for ADS department
- › Consolidated multiple content sources into a single entity to support 120 DBA's with a \$23M operating cost

### University of Michigan Coursework

Introduction to Computer Security (EECS 388)

- › Conducted application attacks (buffer overflows), cryptographic attacks (length-extension, hash-collision, Bleichenbacher's), web attacks (XSS, SQL injection, CSRF)
- › Penetration tested a closed system

Web Databases (EECS 485)

- › Full-stack developed a social networking, picture-sharing web application, and a search engine utilizing tf-idf and PageRank statistics

### Student Space Systems Fabrication Laboratory | University of Michigan

Miniature Tether Electrodynamics Experiment (MiTEE)

- › Programmed mission critical embedded software in C on T.I.'s MSP430FR5969 microcontroller
- › Designed and implemented SPI communication protocol between main and subsidiary processors

### The Stryker Corporation

Firmware Upgrade Tool

- › Designed using MVC and consulted with end-users for needed features
- › Spearheaded full-stack development to service the branch's most profitable product

## Work Experience

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**The Boeing Company** - Software Development Intern

Summer 2016

**Student Space Systems Fabrication Laboratory** - Software Developer

Winter 2015 – Fall 2015

**Stryker Corporation** - R&D Software Engineering Intern

Summer 2015

## Distinctions

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- › University Honors, 2 semesters
- › Dean's List, all semesters
- › University of Michigan Regents Merit Scholarship
- › University of Michigan Alpine Ski Team