

## Education

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University of Michigan, College of Engineering  
**B.S.E. in Computer Science Engineering**, Math Minor  
GPA: 3.76/4.00

April 2017

## Programming Languages

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

## Relevant Projects

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<https://github.com/buechechristian>

### Major Design Experience

Bubble (iOS Mobile App)

- Developing an augmented reality app that connects students and recruiters at career fairs
- Programming View Controllers in Swift and enabling AR through JavaScript calls to Wikitude's API

### MHacks 8

NeuroCritic (Web App)

- Adapted an LSTM network to predict art reviews character-by-character through machine learning
- Scraped and cleaned the HTML from art blogs for training dataset
- Seeded neural net with image description using Microsoft's Cognitive Services Computer Vision API

### 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

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

### 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 MVVM pattern in C# WPF and consulted with end-users for needed features
- Spearheaded full-stack development to service the branch's most profitable product, the SPI3

## 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

## Upper-level Coursework

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**Operating Systems** (EECS 482)

Fall 2016

**Mobile App Development for Entrepreneurs** (EECS 441)

Fall 2016

**Computer Security** (EECS 388)

Winter 2015

**Web Databases** (EECS 485)

Fall 2015