# Jay Tayade

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## EDUCATION

**University of Michigan**                                                                                                                    **Ann Arbor, MI**
- BSE, Computer Science, GPA: 3.4/4.0                                                                                     *Sept. 2015 – May 2019*

## EXPERIENCE

**Nordstrom | Software Engineering Intern**                                                                                      **Seattle, WA**
                                                                                                                                                        *May 2017 – Aug. 2017*
- Developed a service that allowed users to select and watch items of interest and utilized the collected interest data to generate efficient demographically targeted sales. Utilized **React** for the front end, **Python/Flask** and **Firebase**.
- Used **Java** and **Node.js** to develop and deploy a cross-platform asynchronous middleware messaging API that utilized **Redis** based message queues to communicate between applications. Reduced required message handling code by 80%.
- Developed a **Java/Spring** application to prototype a modernized, **Redis** based dataflow for handling transactions, determining loyalty point totals and updating customer loyalty databases.

**Principal Financial Group | Software Development Intern**                                                          **Des Moines, IA**
                                                                                                                                                        *May 2016 – Aug. 2016*
- Utilized **React Native** to develop a mobile application to allow sales team members to simulate use cases for Principal services
- Developed a **Java/Spring** application designed to track, report and validate over 200 daily Java application deployments to IBM WebSphere environments. Utilized **React** to design a responsive web frontend for the application
- Utilized **ASP.NET** and the **Cherwell API** to develop a web based service management tool for developers

**Michigan Autonomous Aerial Vehicles Design Team | Software Engineer**                                   **Ann Arbor, MI**
- Worked on the controls team to develop software for various embedded systems on the vehicle          *Sept. 2015- Present*
- Worked to develop a **C++** and **Python** based physics simulation to test and develop the drone's computer vision capabilities. Utilized **OpenGL** and **Bullet Physics** to visualize and model the quadcopter in 3D space
- Designed an algorithm to calibrate onboard inertial measurement units and gyroscopes
- Participated in regular flight testing and helped to educate new members on proper flight testing technique and safety

## PROJECTS

BeepBox: A smart mailbox that is designed to alert users when mail is delivered as well as provide theft deterrent featured

- Utilized a Wifi enabled Arduino with a firebase database and designed a web service in flask to listen for updates while using the Twilio API for alerting users and accepting user commands to check for mail and sound alarms.

PhotoTag: An Android game that gives users tags and challenges to take a picture including as many tags as possible

- Integrated the Clarifai API and used firebase database to both store tags and handle multiplayer games.

## TECHNICAL SKILLS

- Knowledgeable in C++, C#, Java, Ruby, Python, HTML, and JavaScript.
- Experienced with frameworks: ReactJS and Angular.JS
- Experienced with web databases: MongoDB, Redis and Firebase
- Experienced with web frameworks: Ruby on Rails, Node.js, SpringBoot
- Experience with mobile development using the Android SDK and Xamarin for IOS

## SELECTED COURSEWORK

- EECS 281: Data Structures and Algorithms, 2016
- EECS 280: Programming and Data Structures, 2016
- EECS 203: Discrete Mathematics, 2016
- EECS 285: The Java Programming Language, 2014
- EECS 370: Intro to Computer Organization, 2017
- EECS 376: Foundations of Computer Science, 2017
- EECS 482: Operating Systems, 2017