RYAN A. CHING

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EDUCATION

Brown University Providence, RI August 2017 – Present

Master of Science in computer science

GPA: 4.0

Expected graduation date: May 2019

University of Pittsburgh Pittsburgh, PA August 2013 – May 2017

Bachelor of Science in Computer Science, minor in economics, *summa cum laude*

TECHNICAL SKILLS

Programming Languages

- Proficient in: Python, Java, C, JavaScript, HTML/CSS, SQL
- Familiar with: C++, Matlab, Swift

Tools and Frameworks

- AWS, NumPy, scikit-learn, OpenCV, Firebase, Node, Git/Github, Hadoop, React, JQuery, AngularJS, BootstrapJS, D3.js, ReactNative, Xcode, Android Studio, Bootstrap, Agile methodology

WORK EXPERIENCE

Hasbro, *Software Developer Intern* Providence, RI May 2018 – August 2018

- Built a machine learning model to classify and tag large numbers of product images and digital assets. Implemented the bag of visual words computer vision model utilizing SIFT feature extractor, k-means clustering, and support vector machines in Python.
- Built a RESTful API using Node.js and Express to query a Mongo database and return the requested data. Integrated an authentication API, which requires the client to acquire a key and secret before querying the API.
- Updated a front end brand site to load data dynamically from the API

Yellow Brick App, *Software Developer* Pittsburgh, PA July 2016 – August 2017

- Built the Yellow Brick mobile application for iOS and Android, utilizing tools such as ReactNative, AWS, Java, Swift, and Xcode
- Developed an interactive web application to work alongside our mobile app using tools such as jQuery, MapBox, AWS, and D3 JavaScript library for data visualization

PNC Financial Services, *Software Developer Intern* Pittsburgh, PA June 2016 – August 2016

- Built additional tools for an enterprise level web application using AngularJS, D3, BootstrapJS, Java Spring framework, Maven, and RESTful web services
- Worked in AGILE environment

TECHNICAL PROJECTS

Emotion Classifier - Accesses the user's webcam to classify which emotion the user is expressing with 87% accuracy

- Utilizes computer vision feature detection to extract the user's facial feature points via the webcam
- Trains a support vector machine on a facial feature dataset to classify the user's current emotion

Places - An iOS mobile app that allows users to create interactive travel blogs, viewable on the Google Maps api

- Gained experience using Swift 3 and Xcode to build an iOS app that allows users to upload photos and text blogs of their travel experiences
- Utilized Google Maps api to display travel locations and Firebase to store photos and photo metadata