# **Charlie Ching**

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## **EDUCATION:**

#### University of Maryland, College Park

- B.S. in Computer Science
  - Upper Level Coursework: Machine Learning, Algorithms, Data Structures, Data Science, Cloud Computing with AWS,
     Computer Systems Architecture, Human Computer Interactions, Full Stack Web Dev, Computer and Network Security
- Minor in Technology Entrepreneurship
- Environment, Technology, and Economy Scholars Program:
  - o Highly selective 2-year living and learning program that explores the concept of global sustainability

## **TECHNICAL EXPERIENCE:**

- Languages: Java, SQL, Python, R, HTML/CSS, SASS/SCSS, JavaScript, Ruby, C, OCaml, Prolog, MATLAB
- Frameworks/Libraries: React, Node, Bootstrap, jQuery, Maven
- Skills/Technologies: Web Development, UI/UX, Amazon Web Services, Git/GitHub, RESTful API, Apache Tomcat, Wireshark

## **WORK EXPERIENCE:**

# JPMorgan Chase & Co. - Columbus, Ohio

June 2018 - August 2018

GPA: 3.697/4.0, Expected Graduation: May 2019

Software Engineering Intern

 Developed an application that runs voice commands through Amazon Alexa Voice Services to utilize and obtain the results of services such as the Chase online web application, mobile application, and internal tests by using technologies including Spring Boot, Swagger, Cassandra, OrientDB, Selenium, Maven, and Cucumber

## Crowdkeep - Washington, D.C. (Startup)

**June 2017 - September 2017** 

Software Engineering Intern

• Enhanced and implemented new features for the React based web application through UI/UX improvements, cross browser compatibility, quality assurance testing, bug fixes, website traffic analysis, deep linking between web and mobile applications, HTML validation, CSS compression, image compression, and gulp minification

#### BAE Systems - Washington, D.C. (Sector partnered with the U.S. Navy)

May 2016 - August 2016

Software Programming Intern

- Created web pages hosted on an Apache Tomcat server consisting of information from the Navy database by using SQL, the Hibernate framework, and the Struts 2 framework
- Created an application consisting of JSP, HTML, CSS, and Java that could be placed into any dynamic web project, displaying every component as a downloadable link

## **LEADERSHIP AND TEACHING EXPERIENCE:**

## University of Maryland, College Park

August 2018 - Present

Instructor for a Student Initiated Course: Front-End Web Design and Development

• Co-create all course content and co-teach students how to create responsive websites using modern web-technologies

#### University of Maryland, College Park

February 2018 - May 2018

Undergraduate Teaching Assistant for Object Oriented Programming

• Taught a biweekly discussion section, created lesson plans and material, graded examinations and projects, held office hours, and monitored and answered student questions on an online discussion board

#### **HACKATHONS:**

• Technology coordinator for Bitcamp, the largest hackathon of the East Coast in the spring

April 2018

Coding Mentor for Technica, the University of Maryland's all women hackathon

November 2017

# PROJECTS:

# Natural Language Processor

December 2018

• A script built using Python and the GloVe word embedding algorithm and Twitter model that converts user home automation commands into valid commands by using a threshold and measuring the relationship between words across 300 dimensions

#### Stock Analyzer

May 2018

A program written in R that analyzes NASDAQ stock data through data curation, parsing and management, exploratory data
analysis, and machine learning to determine the best time to buy and sell a specific stock, what the stock price will be in the
future, and ultimately how to maximize profit

Food Tracker December 2017

• A web application built with DynamoDB, CloudTrail, S3, and the USDA Food Composition Database API that records nutritional values of food eaten throughout the day and recommends food to help the user maintain a well-balanced diet

# Home Foods October 2017

• A web application built using HTML, SASS, JavaScript, and Node.js that uses the McCormick API to generate a list of recipes for users to request and customize meals to be delivered by chefs within a specified proximity