PRADYOTH VEMULAPATI

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EDUCATION

Seattle, WA **University of Washington** **Sept 2016 – March 2020**

- **Major:** Computer Science, B.S.
- **Class Standing:** Senior
- **Achievements:** Dean's List Spring 2017, Spring 2018 - Present
- **Relevant Coursework:** Computer Networks, Android Development, Computer Vision, Databases, Machine Learning, Data Structures, Systems Programming, Programming Languages, Matrix Algebra

EXPERIENCE

Software Development Intern **MacCoss Lab, UW Genome Sciences** **June 2019 - Present**

Skyline Project (skyline.ms) – #1 most used application in the world for targeted mass spectrometry.

- Developed a backend service to refine molecular data based on statistical methods.
- Extended the application's UI and command line arguments to include new refinement methods.
- Refactored existing refinement code to adhere to the model-view-controller design pattern.
- Designed and built an internal tool to auto-correct and zip .resx files with a user interface and progress monitor.
- Leveraged knowledge in C#, object oriented design, algorithm complexity, Windows Forms, and Git.

Research Assistant **Digital Financial Services Research Group** **April 2018 - December 2018**

UW Pesa (uwpesa.com) – web-based mobile money sandbox for fast prototyping of financial service products.

- Increased modularity of USSD application by defining screens in YAML and integrating into Django application.
- Created REST API methods for a mobile financial transactions server in Python Django.
- Wrote unit tests for API methods and internal methods to ensure robustness.
- Leveraged knowledge in Python, Django framework, server-side development, and Git.

SOFTWARE PROJECTS

Personal Website: *pradyoth.dev* (for additional information and projects)

- Created a personal portfolio website using HTML, CSS, and Bootstrap.

iOS Food Finder App (2019)

- Developed an iOS application that locates nearby restaurants based on a user provided picture of a food.
- Integrated the Firebase ML Kit SDK to call the Google Cloud Vision API and label the given image.
- Called the Yelp Fusion API to find restaurants that are relevant to the image label and are close to the user's location.
- Incorporated logic to handle asynchronous tasks for dependent API requests.
- Designed a simple and straightforward UI to take pictures and display restaurant results using SwiftUI.
- Utilized: Swift, Firebase ML Kit, SwiftUI

Photo Caption Generator (2017)

- Built a web scraper to pull song lyrics from Genius.com, and parsed them into a csv file.
- Used the Azure Computer Vision API to identify a given image and match keywords with song lyrics.
- Created a simple web interface and retrieved lyrics from SQL database.
- Won the special prize at CodeDay Hackathon for using a variety of interesting API's.
- Utilized: Python, Java, SQL, JavaScript, PHP, HTML

Tic Tac Toe (2018)

- Designed a tic tac toe game with a simple command line interface.
- Coded an unbeatable AI bot based on the minimax algorithm.
- Created a GUI using Google Web Toolkit to deploy on my personal website.
- Utilized: Java, Google Web Toolkit

Skills

- **Languages:** *(proficient)*: Java, C, C#, Python *(familiar)*: C++, Swift, SQL, NoSQL/SQL++, HTML/CSS
- **Technologies:** *(proficient)*: Git, Unix, Bash scripting, Visual Studio *(familiar)*: Azure SQL Server, Django, Google Web Toolkit, Android (Java), Xcode, Java Swing, Java Spark