Sai Vishaal Yalamanchali

Email : vishaal.yalaman@gmail.com
https://github.com/vishytheswishy
Mobile : +1-510-556-7738

Education

- **University of California, Irvine** — Irvine, CA
  Computer Science / Biology (double major), B.S., Core GPA: 3.7 — *Exp. Graduation June 2022*
- **De Anza Community College** — Cupertino, CA
  Computer Science, A.S., GPA: 3.6 — *Aug. 2018 – June. 2019*
- **California State Polytechnic University, Pomona** — Pomona, CA
  Biology (General), B.S., GPA: 3.7 — *Sept. 2017 – Feb. 2018*

Experience

- **Prifina** — San Francisco, CA
  Software Engineering Intern — *Jun 2019 - Sept 2019*
  - **Objective**: Worked with AWS Serverless services such as API Gateway, Lambda, and the S3 bucket to implement filesharing. Created a template to establish a method of documentation of AWS Lambda functions within the prototype.
- **IT SHOULDERS** — Fremont, CA
  Software Engineering Intern — *Jun 2020 - Sept 2020*
  - **Objective**: Created Salesforce to GCP pipeline, implemented through the creation of a REST API that enabled Salesforce PushTopic tracking. Implemented using the Google Kubernetes Platform where SalesForce data was streamed to Google Pub/Sub and stored using Google BigQuery.

Projects

- **Fabflix**
  Full-Stack WebApp — RESTful API — 2020 — *AWS-EC2, MySQL, Apache, Java, JavaScript, Android*
  - **Function**: Created a website with functionality similar to Netflix (browsing, searching, and purchasing movies from a remote server). Implemented on AWS using a variety of JavaScript, servlets, HTML, Apache Tomcat, AJAX, CSS, and XML parsing to create the website while also being linked to a MySQL database.
  - **Scalability**: Implemented recaptcha, cookies, and load balancing via master-slave instances, implemented an android app using get and post requests made to back-end REST API.
- **Agent Based Cancer Simulation in Angiogenic — Hypoxic Environments**
  Agent-Based Modeling — 2020 — *Python, Mesa, Heroku*
  - **Description**: Looked into biological perspective of tumor phenomena regarding VEGF mutations and implemented a mathematically backed solution using Mesa, an agent based python package.
- **Machine Learning Prediction Model on Breast Cancer Dataset**
  Machine-Learning Model — 2019 — *PyTorch, Jupyter Notebook, scikit-learn*
  - **Function**: created to predict whether or not a patient had breast cancer based on the Breast Cancer Wisconsin (Diagnostic) Data Set.
  - **Methodology**: Implemented Random Tree Forest Models, Bayes Classifiers, linear SVM's and other ensemble models to create an accurate model.
- **Customized UCI ICS Department Search Engine**
  Search Engine — 2019 — *Python, BeautifulSoup, nltk*
  - **Function**: created to scour UCI websites and implemented initially using a web crawler to index all tokens/documents into an inverted index cached as JSON files. Searches where under 100ms and memory overhead was minimal.