Rishi Chillara

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EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY — Atlanta, GA
B.S in Computer Science — Expected: May 2023
Focus in Artificial Intelligence Human Computer Interaction — Major GPA: 4.00/4.00
Minor in Economics
Relevant Coursework: Data Structures, Analysis of Algorithms, Intro to AI, Objects and Design, Computer Architecture

EXPERIENCE

NURO — Mountain View, CA
Software Development Intern — Summer 2022
• Created a custom Publisher Subscriber Messaging System to replace Google Pubsub using **GRPC** in **Golang**
• Built to handle over **10k Queries per Second**, Analytics exposed by **Prometheus** and collected by **Google Stackdriver**
• Provided native priority support for messages with **exactly once delivery semantics** with options for explicit redelivery
• Backed by **Redis**, Utilized **Lua** to guarantee atomicity and to build a custom time to live system

GOOGLE — Mountain View, CA
Software (STEP) Intern — Summer 2021
• Designed an internal tool to correct errors in categorization and keep data consistent through **multiple update cycles**
• Refactored app categorization pipeline to **reduce write workload** to Spanner Database by **92%**
• Worked to Prune Database from inaccurate predictions through **Mutation Pools** and utilizing the **Spanner and Flume APIs**
• Implemented a custom **Proto Comparator** to determine Category differences in a database of **500k+ entries**

PRONTO AI — San Francisco, CA
Software Engineering Intern — Summer 2020
• Created **Data Mining Pipeline** to improve detections of pedestrians/objects for self driving trucks
• Discovered discrepancies between in- truck **Yolov3** object detection and **Yolact**, **MaskRCNN**, **DETR** object detection models with **92%** accuracy
• Worked **Keras**, **Pytorch**, and **Tensorflow** to preprocess images and post-process detections into COCO normalized form
• Developed filtering script to efficiently compare and display differences in detections visually between all models through **IOU bounding box comparison**

SKILLS

• **Programming Languages/Tools:** Go, Python, Java, C, HTML, CSS, JavaScript , GCP, Firebase, Spanner, Flume, GIT, Bazel, Docker, Kubernetes
• **Design:** Figma, Tableau, Adobe Photoshop, Illustrator, Premiere, After Effects, Lightroom, XD, Sketch
• **Qualitative Experience:** Agile, Scrum, Stakeholder Research, Competitive Analysis, Split Testing, Primary Market Research

PROJECTS

FACEBOOK CHATBOT — Mar 2021
• Created chatbot in **Python** with a **team of 8** to assist in group chats with various call functions
• Utilized **fbchat API** to communicate with users and deployed through **AWS Lambda**
• Developed **custom CI/CD pipeline** with **Github Webhooks** and **Flask** to update requirements and deploy new releases
• Stored information per user in **Firebase** to ensure scalability and created **automatic garbage disposal** to prevent wasted space [**CODE**]

AI VIDEO TITLE GENERATOR — Mar 2020
• Created a video title generator using a **Recurrent Neural Network** to create unique titles off previous results
• Built-in **Python** and trained on a corpus of 9000 video titles scrapped from Youtube using **Youtube API**
• Built off of **textgenrnn**, to create a character by **character generation model**, trained on **Google Colab** [**CODE**]

SQUAD FINDER — Dec 2019
• Web App to find the closest meeting point between a group of friends
• Utilized **socket.io** for live location updating and **Firebase** to store user data and **Manhattan distance calculations**
• Created Server Side in **Node.JS** with Firebase as a **persistence layer** for faster lookup and indexing [**CODE**]

SAT SCORE PREDICTION BOT — Dec 2018
• Built a Reddit Bot in **Python** used **>3300** times that predicted students score based on the estimated number of questions wrong
• Developed using Reddit **PRAW API** to manage login, credentials, and messages
• Utilized **Beautiful Soup** to scrape public score databases to ensure accuracy in lieu of a public API [**CODE**]