Roham Ghotbi

818-836-8118 rohamghotbi@berkeley.edu github.com/Roham-Ghotbi linkedin.com.in/Roham-ghotbi

Education

University of California, Berkeley — Berkeley, CA
Electrical Engineering and Computer Science (EECS) Masters of Engineering — *Fall 2020 – Fall 2021*

University of California, Berkeley — Berkeley, CA
Electrical Engineering and Computer Science (EECS) Bachelor of Science — *Fall 2016 – Fall 2018*

Technical Skills

- **Programming Syntax:** Python, JavaScript, C/C++, Bash, Java, HTML, CSS, SQL, Git.
- **Machine Learning and AI:** Deep Learning, Deep Reinforcement Learning, Computer Vision, Classical Machine Learning, Convex Optimization, Discrete Math and probability.
- **Computer Science:** Computer Security, Data Structures and Algorithms, Operation Systems, Network Protocols.

Relevant Work Experiences

Nebulon — Fremont, CA
Backend, Cloud and AI Engineer — *July 2021 - Present*

- Researched and improved our ransomware detection system which utilized partitioned bytes of data to detect anomalies through compressibility changes and data deletion spikes.
- Worked alongside staff engineers and designers to improve the performance of the current NebOS Platform to ensure scalability and faster deployment of the system for clients use.
- Added support for Offload Data Transfer to the NebOS running on Windows Servers. Offload transfer introduces a tokenized operation to move data on storage devices connected to each other that would save network bandwidth and CPU processing power
- Developed new data flow designs to enhance the back-end pipelines for the client's new service requests through IBM Cloud in order to make the user experience seamless and improve the overall services performance.

IBM Cloud and Cognitive Software — San Francisco Bay Area, CA
Cloud Software Developer — *Jan 2019 - July 2021*

- Implemented and designed the pipeline to support sales of the IBM cloud Services through third party sellers. The pipeline required an extensive expansion to support a new line of orders in order to assign discounts and report the sales properly.
- Developed a fully automated script for the backend's password rotation. The script significantly improved the Authorization token creation and replacement as the manual process was extremely time consuming and prone to human error.
- Designed and developed an extensive health-check for the microservices currently used as a diagnostic tool by the IBM Cloud Platform back-end to pinpoint inefficiencies in execution of the services and faster detection of issues in the production code(live system in use by clients).

Projects

Personal and Academic Projects

- Worked on optimizing a simulation of the traffic in the city of Fremont to be used to study and mitigate the city's traffic issue during the rush hours(Capstone project).
- Created and trained multiple Neural Networks and deep RL models, ranging from image classifiers to DQN Actor Critic and stochastic model-based RL systems in the openAI gym environment.
- Designed and developed an interpreter for a subset of the SQL language using Java).
- Created a map of Berkeley with ability to zoom in and zoom out and path finding algorithm (Dijkstra's and A* algorithms).