https://www.linkedin.com/in/utk1801/

http://utk1801.github.io/

UTKARSH GARG

utgarg1993@gmail.com

+1 (631) 215-6568

EDUCATION

- **Stony Brook University**   **Stony Brook, New York**
  *Master of Science in Computer Science; **GPA: 3.77/4***   *Aug 2019 - Dec 2020*
  Coursework: Data Science, Distributed Systems, Algorithms, Databases, Computer Vision, NLP, Visualization
  Teaching Assistant: Data Structures in Java (Spring'20)

- **SRM University**   **Chennai, India**
  *Bachelor of Technology in Computer Science; **GPA: 9.52/10***   *Aug 2011 - Jul 2015*
  Coursework: Data Structures & Algorithms, AI, Data Mining, Image Processing, OS, Network Security

WORK-EXPERIENCE

- **Oracle America**   **Santa Clara, California**
  Senior Member of Technical Staff   *Feb 2021 - Ongoing*
  - **Identity & Access Management (OAuth2):** Design and implement customer requirements around OAuth, OIDC standard protocols, and AuthN/AuthZ mechanisms to exchange tokens across various IAM systems.
  - Primary owner for **Social Login** component for Oracle Cloud's IAM solution.

- **Sony PlayStation**   **San Diego, California**
  Software Engineering Intern   *May 2020 - Aug 2020*
  - **Vendor-Portal Service**: Designed a microservice on top of payment gateway that provides configuration to deliver a route to different vendors hosted on the gateway. Leveraged ***AWS Suite*** and ***Spring Boot***.
  - **Chargeback API:** Proposed an ***orchestration flow*** to serve as a state machine for 'chargeback' functionality.

- **VISA Inc**   **Bangalore, India**
  Associate Systems Analyst   *July 2015 - July 2019*
  - **Identity & Access Management:** Streamlined IAM systems, by optimizing usability, developing over ***OpenID*** (Forgerock), ***OAuth & Federation*** related workflows for a Tier-0 application, serving gateway to 100+ services.
  - **Enrollment Workflows:** Redesigned features for user login flows and service entitlement pipeline, easing resource creation with smart suggestions and throttling test coverage to 85%+.
  - **Stack Test Tool:** Facilitated an ***automated performance monitoring*** tool to test end-to-end flow for the app, and assess server health/performance bottlenecks of the application, saving 70% of the manual effort hours.
  - **Automation:** Authored scripts for alert-monitoring and health checks; also setted up IFTTT type rules to take ***self-healing*** actions based upon encountered issues, reducing manual effort by 50%.

- **Hasura**   **Remote**
  Product Development Fellow (Part Time)   *Nov 2017 - Feb 2018*
  - **AI Chatbots & Alexa Skill:** Implemented ***conversational bots*** for Facebook messenger platform. Also deployed voice skills which gathered over 200+ activations within a month of Go-Live.
  - **Cloud-Native Apps:** Gained hands-on in ***microservices*** & K8's clusters, while working with ***CNCF systems***.

PROJECTS

- **Recovering Visual Encodings from Chart Images:** Developed an end-to-end text analysis pipeline that recognizes the text content using OCR, and classifies their role in the chart (e.g., bars, lines, points, or areas) using CNN and ***AWS Rekognition API*** (Masters' project under Prof. Klaus Mueller at Visual Analytics and Imaging Lab)
- **Passwordless Ultrasonic Auth:** Researched on a new factor for authentication using ultrasound for data transfer. Used QuietJS library, an audio QR implementation for browsers. ***Won Best Security Hack @CEWIT'2020.***
- **Retail Sales Analysis:** Performed EDA on 1.7M records for hardware store. Used ***Apriori*** for market basket analysis, ***RFM*** for segmenting customers, ***T-SNE*** for grouping products & ***ARIMA*** model for time series forecasting.
- **Visa Exclusive Marketplace:** Designed web-app for loyalty-driven project aimed at incentivizing VISA cardholders boost card payments, against exclusive offers/rewards, using VISA APIs, Facebook's OAuth2.0 auth and ***GraphAPI***.
- **Netflix Clone:** Leveraged React.JS to develop a UI backed by **GraphQL** Rest APIs to populate movie titles by genres.

PROGRAMMING SKILLS

Languages: Java, Python, Javascript, C++   **Technologies**: AWS, Docker, Kubernetes, Jenkins, Tableau, Git
Frameworks: Spring Boot, Flask, TensorFlow, Pytorch   **Databases**: GraphQL, SQL, LDAP, MongoDB, PostgreSQL