700 Health Sciences Drive,
Chapin Apartments,
Stony Brook, NY 11790

UTKARSH GARG
https://utk1801.github.io

+1 (631) 215-6568
ugarg@cs.stonybrook.edu
linkedin.com/in/utk1801

EDUCATION

Stony Brook University, Stony Brook, New York   **Aug 2019 – Dec 2020***
Master of Science in Computer Science | **CGPA: 3.74/4.00**
Coursework: Data Science, Visualization, Distributed Systems, Algorithms, Databases, Computer Vision, NLP, ProbStats
Graduate Teaching Assistant for Data Structures (CSE- 214) under Prof Ahmad Esmaili

SRM University, Kattankulathur, Chennai, India   **Aug 2011 – May 2015**
Bachelor of Technology in Computer Science Engineering | **CGPA: 9.52/10**
Coursework: Data Structures & Algorithms, AI, Data Mining, Image Processing, Operating Systems, Network Security

WORK-EXPERIENCE

Software Engineer Intern   **Sony PlayStation, San Diego, CA**   **June 2020 – Aug 2020***
- Working in Global Payments and Fraud transactions team. Responsible for designing a web-layer on top of Payment Gateway that provides configuration to deliver a route to different vendors hosted on the gateway.

Software Engineer   **VISA Inc, Bangalore, India**   **Apr 2017 – July 2019**
- **Identity & Access Management**: Streamlined IAM systems, by optimizing usability, developing over OpenID (Forgerock), OAuth and Federation related workflows for a Tier-0 application, serving gateway to 100+ services in the background.
- **Enrollment Workflows:** Redesigned features in .NET for user login flows and service entitlement pipeline, easing resource creation with smart suggestions and throttling functionality test coverage to 80% by improving error/exception visibility.
- **Stack Test tool:** Developed 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.
- **Microservice for data-migration:** Led a team of 5 to build and manage Docker container clusters, orchestrated using Kubernetes, migrating workloads on containers using Kafka Streams.

Systems Analyst   **VISA Inc, Bangalore, India**   **July 2015 – Mar 2017**
- **Jenkins integration**: Managed 250+ Linux/Windows VMs for troubleshooting and deployment of infra & services.
- **Splunk dashboards**: Visualized machine generated big data to check overall performance of various applications.
- **Automated Qualys patching**: Wrote Python/shell scripts to automate server remediation, **reducing manual time by 50%.**
- **SSL certificate upgrades**: Worked actively on cert upgrades and automated scripts to check for certificate expiry.

Product Development Fellow| Remote   **Hasura, Bangalore, India**   **Nov 2017- Feb 2018**
- Implemented **conversational AI bots** for Facebook messenger platform. Link: https://hasura.io/hub/users/utkarsh/
- Designed and deployed voice skills for Amazon Alexa. **Gathered over 200+ activations within a month of Go-Live.**
- Gained hands-on experience in microservices & K8's clusters, while working with **CNCF (Cloud-Native) systems**

TECHNICAL SKILLS

- Languages & Databases: Java, Python, Javascript, C/C++, C# , .NET, HTML5, CSS3, MongoDB, PostgreSQL, LDAP, DB2
- Platforms & Tools: AWS, GCP, Google Colab, Docker, Kubernetes, Tableau, Jenkins, Git, JIRA, Slack, IntelliJ, Eclipse, PyCharm
- Frameworks & Libraries: Spring Boot, Hibernate, Kafka, PyTorch, TensorFlow, Keras, Node.JS, Selenium, Ajax

PROJECTS & RESEARCH

- **Retail Sales Analysis (Sklearn/Pandas):** Performed EDA on 1.7M records for hardware store. Used Apriori for market basket analysis, RFM for segmenting customers, T-SNE for grouping similar products and ARIMA model for time series forecasting.
- **Visa Exclusive Marketplace** (**Java):** Designed a 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 Graph API.
- **Restaurant Finder (Java SpringBoot):** Delivered a full-stack application using Spring boot framework and React.JS backed by PostgreSQL DB. Configured REST endpoints using Hibernate ORM and documented API using SwaggerUI.
- **Pose Detection (Pytorch)**: Implemented PoseNet model on Human36M dataset to predict 3D poses from 2D sensor data. Implemented Kalman filter to correct noisy measurements from faulty sensors, with an average accuracy of 82%.
- **Unified Summarization of Scientific Papers** (**NLP**): Extended existing approaches to implement a unified model, over Abstractive & Extractive ensemble, using bidirectional LSTM. Evaluated on ROUGE scores, with 43.08 recall.

AWARDS & CERTIFICATIONS

- **Passwordless Ultrasonic Auth:** Won Award for Best Security Hack @CEWIT'2020,using AudioQR. https://bit.ly/2vC7fry
- **Neural Networks and Deep Learning by deeplearning.ai** (Instructor: Andrew Ng) | Coursera | License: 93XU2LHY83A9
- **Immersive Data Science Program** | Greyatom | License: https://www.credential.net/w95pzloj
- **DevOps Certified** | Edureka | License: https://edureka.co/verify | ID: BTTVBVTA