

700 Health Sciences Drive,  
Chapin Apt, Stony Brook University,  
Stony Brook, NY 11790

# UTKARSH GARG

<https://utk1801.github.io>

+1 (631) 215-6568  
[utkarsh.garg@stonybrook.edu](mailto:utkarsh.garg@stonybrook.edu)  
[linkedin.com/in/utk1801](https://www.linkedin.com/in/utk1801)  
[github.com/utk1801](https://github.com/utk1801)

## EDUCATION

### Stony Brook University, Stony Brook, New York

Aug 2019 – Dec 2020\*

- Master of Science in Computer Science (Fall'19 Intake) : Current GPA: 3.67/4.0
- Graduate Coursework: Data Science, Computer Vision, Natural Language Processing, Analysis of Algorithms

### IIIT Bangalore,Bangalore,India

Sept 2018- Aug 2019

- Post Graduate Diploma in Full Stack Software Development (Upgrad/Online)

### 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

## EXPERIENCE

### Software Engineer

VISA Inc, Bangalore, India

Jul 2015 - Jul 2019

#### Server Side Development:

- Streamlined Identity & Access Management systems, by optimizing usability and developing over OpenID (Forgerock), OAuth and Federation related workflows for a Tier 0 application(VISA Online), serving gateway to 100+ services in the background.
- Improved features including overhaul of user signup/login flows and service entitlement pipeline, adding 2FA workflows, easing resource creation with smart suggestions and throttling functionality test coverage to 80% by improving error/exception visibility.
- Developed a Stack Test tool to test end to end auth flow from Proxy->Login-> Sharepoint home page for the app, thereby helping assess server health and performance bottlenecks of the application.
- Built alerting systems & Splunk dashboards for proactive monitoring and self-healing,thereby saving ~75% of manual effort hours.

#### 3rd Party Integrations:

- Part of 90/10 initiative, developed a mobile app to facilitate Instant Payouts for Small Merchants using Stripe APIs.
- Spearheaded idea of creating a "Visa Exclusive Marketplace", a Loyalty-driven project aimed at incentivizing existing VISA Cardholders boost card payments, in return for exclusive offers/rewards, using VISA APIs. Selected for Regional Finals-Hackathon.
- Leveraged Facebook's OAuth2.0 auth-protocol and Graph API for profiling cardholders' social media profiles, to extract their interests/likes for personalized offers.

### Product Development Fellowship

Hasura,Bangalore, India

Nov 2017 – Feb 2018

- Implemented Chatbots for Social Media platforms, for my FB page. Link: <https://hasura.io/hub/users/utkarsh/>
- Developed Voice Skills for Amazon Alexa(live on Skill store). Gathered over 200+ activations within a month of Go-Live.
- Gained hands-on on Microservices & K8's clusters, while working with CNCF (Cloud-Native) systems.

### Summer Intern

HP, Lucknow, India

May 2013- July 2013

- Worked on Securing Linux Servers from Network Attacks, using Backtrack OS. Recognized as the best performer in the batch.

## PROGRAMMING SKILLS

- Languages: Java, Python, Javascript, C++, C, .NET, SQL
- Platforms & Tools: Spring Boot, PyTorch, TensorFlow, Keras, MEAN Stack, MySQL, Google Colab, GitHub, Visual Studio, Eclipse.

## PROJECTS & RESEARCH

- **Retail Data Sales Anlaysis(Sklearn/Pandas)** Performed EDA on dataset of 1.7 million records for an Hardware store. Used Apriori for Market Basket Analysis, RFM for segmenting customers , WordCloud(T-SNE) for grouping related products , ARIMA modelling for time series forecasting . Also estimated Line psychology of a cashier while billing.
- **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.
- **Unified Summarization of Scientific Papers using Abstractive + Extractive Ensemble** : Developed on existing approaches to implement a Unified model using Bidirectional LSTM, evaluated on ROUGE scores => 43.08 recall.
- **Convolutional Neural Network (Deep Learning | Pytorch | TensorFlow | OpenCV)**: Designed a CNN model from scratch, to perform 16-way image classification, highest accuracy observed was 92% with fine tuning of Alex Net.
- **Scene Classification and Object Recognition using SVM (OpenCV/Sklearn)**: Created Bag of SIFT feature representation of the images using KMeans Clustering and Histogram of gradients, trained SVM classifier.

## AWARDS & CERTIFICATIONS

- **DevOps Certified** | Edureka | License <https://edureka.co/verify> | ID : BTTVBVTA
- **ITIL Certified** |APMG International | License ITIL/2000603220
- Recognised with 'Go Beyond' award for my automation work at VISA Inc
- **Outstanding Performance** award at HP India, Ltd. during HPES Summer Internship
- **Immersive Data Science Program** | Greyatom | License <https://www.credential.net/w95pzloj>
- **Neural Networks and Deep Learning by deeplearning.ai** (Instructor: Andrew Ng)| Coursera | License 93XU2LHY83A9
- **Developing Applications with Google Cloud Platform Specialization** | Coursera | License A6XDCT7WBWHK