Akarsha Sehwag

aksh98.github.io
linkedin.com/in/akarshasehwag/
akarsha285@gmail.com
+91 9971408507

Education

B.Tech | Computer Science Engg
IIIT Delhi | 2019 | GPA:7.6/10

Senior Secondary Board (Class XII)
Delhi Public School | 2015 | 92 %

Secondary Board (Class X)
Adarsh Public School | 2013 | 10/10

Skills

TOOLS AND TECHNOLOGIES:
Pandas • Pytorch • Tensorflow • OpenCV • Git • GeoPandas • PySpark • sklearn • Brandwatch • MongoDB • Kafka • Kibana • MySQL • ElasticSearch • AutoCAD • h3/s2

PROGRAMMING LANGUAGES:
Python • C • C++ • Java • LaTeX • SQL

SPOKEN LANGUAGES :
English, Hindi, German(A2 level)

Achievements

- Dean's Award for Innovation in Research and Development.
- Scholarship worth $2800 for attending ElasticON in San Francisco.
- Academic Excellence Award(School)
- School Topper in NSTSE (Rank <300 All India level).

Extra-Curricular

- Community Organizer | Elastic, Delhi
- Organizer & Mentor | Django Girls, Lisbon
- Core Team | PyLadies, LinuxChix
- Coordinator | Creative Arts Club
- Badminton Captain | Sports Council
- Event Head | Tech-fest'17
- Organizing Team | Tech-Fest'16
- Student Mentor | IIITD

Work Experience

June'19 - Now **Associate Data Scientist | Airtel X Labs**
- Engineering features for Customer Segmentation of 300M+ active Airtel users to suggest relevant packs to users and reduce the pipeline bandwidth from 7M sms/day to <0.2M relevant sms/day.
- User Employment-type identification for targeted marketing campaigns.

Jan-Apr'19 **Artificial Intelligence Intern | UnternehmerTUM, Munich**
- Created a working prototype of our product, that lets foreign tourists experience a city based on their interests through tours guided by an autonomous (Level 4) car.
- Implemented Agile development principles along with design thinking, User Story Map & solution validation methodologies.
- Communicated cross-functionally in a diverse team and drived the engineering efforts in the team.
Company sponsors: Audi, BMW and ADAC. *Reference: Dr.Afsaneh*

May-Dec'18 **Data Science Intern | Stanford Univeristy**
- Predict time series data on national level and map it to all the states. Achieved state-of-the-art results. (Journal in writing)
- Predicted change in contribution and productivity of STEM workers in the financial sector using NLP models. *Reference: Dr.Christos*
- Worked with Prof. Prithwiraj Choudhury from Harvard Business School on the analysis & predictions of salary variations w.r.t. country and companies.

Jan-Dec'18 **Undergrad Researcher | Image Analysis and Biometrics Lab**
- Achieved state-of-the-art on deceiving Face PAD algorithms. (More than 30% improvement in the accuracy/PAD error rate.)
- Developed a new architecture of GANs to input two images and generate morphed images.
- Worked on Attribute Classification in Low-Resolution images.
Advisors: Dr. Richa & Dr. Mayank

May-Dec'17 **Chief Operations Officer | Invadex**
A ML SaaS product - Alongside product development, responsible for evaluating internal workforce, to bring in the best value to our partners and handling the operations.
- Represented it in Web Summit'17 (Portugal) and got Malaysian investors for $0.5M.

Publications

2019 **Deceiving the Protector: Fooling Face Presentation Attack Detection Algorithms**
IAPR International Conference on Biometrics, Greece

2019 **Deceiving Face Presentation Attack Detection via Image Transforms**
IEEE International Conference on Multimedia Big Data, Singapore

2018 **Rise of the "Quants" in Financial Services: Regulation and Crowding Out of Routine Jobs** (Acknowledgment)

Projects

- **Detecting Combined Identities**: Used GANs to generate the morphed images/videos and Deep Learning models like VGG'16 to detect forgery.
- **Github User Recommendation system:** Recommended Github Users for Github Projects/Organizations based on the user's activities in Github and StackOverflow.
- **Audio Super-Resolution**: Used 5 Machine Learning models (GANs, Hidden Markov Model, AutoEncoder, Convolutional Neural Network and Long Short-Term Memory Network) to generate a high resolution signal from a low resolution audio with a smaller sampling rate.
- Other Machine Learning / Development projects listed here: **[Github Link]**