Aman Agarwal

amanag.11@gmail.com | +91 75740 14476

EDUCATION

NIRMA UNIVERSITY
BTech in Computer Engineering
May 2019 | Ahmedabad, India
CGPA: 8.61/10

ST. CONRAD'S INTER COLLEGE
Higher Secondary Certificate
May 2015 | Agra, India
Percentage: 95%

LINKS

Homepage: /**Aman Agarwal**
Github: /**amanbasu**
LinkedIn: /**theabecedarian**
StackOverflow: /**aman-agarwal**
Twitter: /**TheAbecedarian_**

SKILLS

LANGUAGES
• Python • Kotlin • Java

TOOLS
• Tensorflow • Keras
• git • sitk • Android Studio

CERTIFICATIONS

• AWS Certified Solutions Architect Associate.
• Certified Python Developer Associate.
• Deep Learning Specialization (5 courses), Prof. Andrew Ng.
• Machine Learning by Prof. Andrew Ng, Stanford University.
• Computer Vision Specialization, University of Buffalo.

ACHIEVEMENTS

• Poster Presentation at **NVIDIA GTC, San Jose, 2019.**
• **Most Innovative Idea award** at HSBC global graduates hackathon, 2019.

HOBBIES

• Body Building and Cooking.
• Health & Nutrition.
• Human Anatomy.
• Cricket, badminton.

EXPERIENCE

HSBC SOFTWARE DEVELOPMENT LTD. | Software Engineer
July 2019 - Present | Pune, India
• Developed the authentication platform for HSBC global mobile banking application.
• Led a team of 4 developers for app-to-app linking on native mobile platforms.
• Technical Lead of 6-member team for HSBC global hackathon, spread across UK, China, HK, Poland, and India. Winning the **Most Innovative** award among 38 teams.

INTEL CORPORATION | Software Innovator for AI
June 2019 - Present
• Worked on DL projects on Intel DevCloud, wrote technical blogs, and trained university students on AI.

GOVERNMENT OF INDIA | Deep Learning Intern
January 2019 – June 2019 | Delhi, India
• Developed three different DL-based solutions using temporal satellite imagery for object detection and segmentation.
• Architectured the solution for the trained algorithm to work in production on AWS.

PUBLICATIONS

• Agarwal, Aman et al. **"DV-Net: An Enhanced Fully Convolutional Network for Volumetric Prostate Segmentation from Magnetic Resonance Imaging."** Submitted to Pattern Recognition and Image Analysis, Springer, 2020.
• Agarwal, Aman et al. **"Using LSTM for the Prediction of Disruption in ADITYA Tokamak."** Submitted to Physics of Plasmas, AIP, 2020.

PROJECTS

IDENTIFYING INDIVIDUALS FROM ECG | ECG Authentication
Jul 2019 – Sep 2019 | Computer Vision/Signal Processing
• The algorithm converts the ECG signals from a smartwatch to corresponding spectrogram and verifies the user through a siamese network.

AMSAT | A holistic system to classify temporal satellite imagery
April 2019 – May 2019 | Computer Vision
• An algorithm to detect the construction activity through temporal satellite imagery.
• A customized I3D Inception network (3DCNN) was trained on just 24 samples, giving accuracy of 85% on a test set of 21 samples.

PROSTATE SEGMENTATION in 3D using MR Images and Fully Convolutional Neural Networks
September 2018 – January 2019 | Biomedical Imaging
• Trained a modified version of V-Net that outperformed the results of baseline in the PROMISE12 challenge.
• The model was enhanced by tweaking its architecture, adding dilation and deep supervision. We improved the accuracy by 6% points.

PREDICTING THE DYNAMICS OF TOKAMAK DISCHARGE
Department of Atomic Energy (India)
May 2018 – Aug 2018 | Nuclear Physics/Signal Processing
• A deep learning model to anticipate the disruption in plasma based on diagnostics like plasma current, mirnov, and loop voltage.
• The model achieved state-of-the-art results for ADITYA Tokamak and was the first algorithm to be used for real-time predictions.