Shantanu Acharya

A-1106, Indira Nagar, Lucknow, Uttar Pradesh, PIN: 226016, India
shan18.github.io | thegeek.004@gmail.com | +91 9559959581

EDUCATION

NIT MIZORAM
B.Tech in Computer Science and Engineering
Grad. July 2019 | Aizawl, India
CGPA: 9.69/10.0
Gold Medalist

SPRING DALE COLLEGE
Higher Secondary Examination
Grad. May 2014 | Indira Nagar, Lucknow, India
Grade: 91.80%

SPRING DALE COLLEGE
High School
Grad. May 2012 | Indira Nagar, Lucknow, India
Grade: 91.40%

LINKS

Github: **shan18**
LinkedIn: **shanacharya**

SKILLS

Programming Languages
Python, C, Java, C++, Javascript, Bash, LaTeX MySQL, Markdown

Tools/Frameworks
Tensorflow, Keras, PyTorch, Django, ReactJS, Redux, jQuery, git, Amazon Web Services, Heroku, Google Cloud

MOOCS

Deep Learning Specialization
Coursera | deeplearning.ai | 2018
5 course specialization. Topics: Neural Networks and Deep Learning, Improving Deep Neural Networks, Structuring Machine Learning Projects, Convolutional Neural Networks, Sequence Models
Grade: 100% on all 5 courses

Introduction to Machine Learning
Coursera | Prof. Andrew Ng, Stanford University | 2016
Grade: 96.9%

PUBLICATIONS

TOPIC-BASED IMAGE CAPTION GENERATION
Arabian Journal for Science and Engineering (AJSE) | Paper
15th November 2019
- Authors: Sandeep Kumar Dash, Shantanu Acharya, Partha Pakray, Ranjita Das and Alexander Gelbukh

EVERY CHILD SHOULD HAVE PARENTS: A TAXONOMY REFINEMENT ALGORITHM BASED ON HYPERBOLIC TERM EMBEDDINGS
Association for Computational Linguistics (ACL) | Paper
5th June 2019
- Authors: Rami Aly, Shantanu Acharya, Alexander Ossa, Arne Köhn, Chris Biemann and Alexander Panchenko

EXPERIENCE

SIMBO.AI | Artificial General Intelligence Software Engineer
June 2019 – Present | Bengaluru, India
- Worked on a variety of domains including Deep Learning, Full Stack Development, Database Management and Linux Server Management.
- Handled several projects where the responsibility of the complete end-to-end project pipeline was given.

UNIVERSITÄT HAMBURG | Research Intern | Github
June 2018 – August, 2018 | Hamburg, Germany
- Created a model to improve an existing taxonomy using distributional semantics.
- Devised a clustering mechanism to cluster nodes in the taxonomy using similarity scores calculated with the help of different word embeddings.
- The model achieved state-of-the-art results on the SemEval-2016 Task13 for the English language with significant improvements over previous methods.
- **Tools:** Python

IIT BOMBAY | Engineering Intern | Github
June 2017 – July 2017 | Mumbai, India
- Developed a virtual simulation for the Single Board Heating System (SBHS).
- Integrated an online quiz taking interface called yaksh.
- Implemented a centralized database in order to prevent data inconsistency.
- **Tools:** Python, Django, Scilab, Apache.

PROJECTS

TENSORNET | Deep Learning | Github | PyPI
Mar 2020 - Present
- Developed a high-level deep learning library on top of PyTorch.
- Implemented some advanced concepts like GradCAM and LR Finder into the package so that they can be used via a simple function call.
- Used modularization and OOP concepts extensively with docstrings for each function in order to maintain a clean and understandable codebase.
- **Tools:** Python, PyTorch.
- **Services:** PyPI.

ACHIEVEMENTS

SCHOLASTIC

Gold Medalist - NIT Mizoram

Graduated as the Gold Medalist. Got awarded with two gold medals for:
• Overall highest academic performance.
• Highest academic performance in branch Computer Science and Engineering.

DAAD-WISE Scholarship

Selected for Summer Research Internship at Germany in 2018

MITACS Scholarship

Selected for Summer Research Internship at Canada in 2018

10/10 grade

During 5th, 7th and 8th Semester at NIT Mizoram

EXTRA-CURRICULAR

Secretary

2019
At Morphosis, the annual technical fest of NIT Mizoram

School Captain

2013
Head of the Student Council at Spring Dale College

Basketball Tournament Winners

2013
Zonal Basketball Championship Tournament at Lucknow, U.P.

PROJECTS (CONTINUED.)

TOPIC BASED IMAGE CAPTIONING | Deep Learning | Github

Oct 2018 - May 2019

- Developed a model which uses Latent Dirichlet Allocation (LDA) to extract topics from the image captions.
- Developed a deep learning based caption generation model using LSTMs.
- Applied the concept of transfer learning to extract image features.
- **Tools:** Python, Tensoflow-Keras, NLTK, OpenCV-Python, MSCOCO-2017 Dataset.
- **Services:** Google Cloud.

STOCK BRIDGE | Stock Market Simulator | Github | Website

Apr 2018

- Built the entire user-company transaction system from scratch.
- Developed a scheduler mechanism for automating user transactions.
- Developed a Bank Model to issue loans and deduct interests from users.
- Extensive usage of django signals, model managers and custom querysets.
- **Tools:** Python, Django, Django REST Framework, chart.js, Bootstrap v4.
- **Services:** Heroku, sendgrid.

CODE WARRIOR | Online Judge Platform | Github | Website

Feb 2018 – Mar 2018

- Built the entire compilation, execution and submission evaluation module from scratch.
- Designed the platform to support languages: C, C++, and Python.
- Constructed a tiebreaker mechanism which uses user submission execution time for ranking users with the same score in the leaderboard.
- **Tools:** Python, Django, Bootstrap v4.
- **Services:** Amazon Web Services, PythonAnywhere, sendgrid.

KART | E-commerce Website | Github | Website

Dec 2017 – Jan 2018

- Built the backend on entirely on Django. Utilized jQuery to introduce asynchronicity to the website.
- Devised the functionality to sell digital items by storing data in AWS S3 Storage.
- Rendered the order summary as a PDF and send it to user after a successful transaction.
- **Tools:** Python, Django, Bootstrap v4, jQuery, Ajax, chart.js, jsrender.
- **Services:** stripe, mailchimp, Amazon Web Services, heroku, sendgrid.

AUTORANKING AMAZON REVIEWS | Machine Learning | Natural Language Processing | Github

Oct 2017

- Ranking reviews on Amazon according to their helpfulness score.
- The problem was modeled as a regression problem. The performance was evaluated by using the coefficient of determination and rank correlation.
- Predictions were made based on various categories of features of the review text, and other metadata associated with the review, with the purpose of generating a rank for a given list of reviews.
- **Tools:** Python, Numpy, Pandas, textblob, scikit-learn.