

Shashank Rangarajan

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EDUCATION

University of Southern California, Master of Science in Computer Science (Artificial Intelligence)

• Courses (tentative): AI, Algorithms, Machine Learning, Applied NLP, Adv. Computer Vision

August 2022–present
Los Angeles, USA

Sri Jayachamarajendra College of Engineering, Bachelor of Engineering (Computer Science)

• CGPA: 9.75 / 10 | Rank #3 in the Department

• Courses: Adv. Math, Algorithms, Data Mining, Neural Networks, OS, Networks, Compilers

August 2015–May 2019
Mysuru, India

WORK EXPERIENCE

Amazon.com (IN), Software Development Engineer

- Designed ETL support on Espresso, and onboarded 1 production use case.
- Re-architected Machine Learning Training Platform, and migrated 90+ production models with 0 error.
- Moved production system to federated AWS accounts with 0-data loss and minimal availability impact.
- Launched and brought in 5 customer teams to Configuration Panel, CLI, and Web UI.
- Mitigated 100+ security risks, Fixed Sev-2s, across 10+ production pipelines owned by Espresso.
- Mentored 1 intern, and orchestrated development of a peer-review component on Espresso.

June 2020–July 2022
Bengaluru, India

Motorola Mobility India, Software Development Engineer

- Devised & launched smart updates for Motorola phones making updates seamless for 100K+ devices.
- Delivered a Game Recommender System for 'Hello-You', providing a customized experience for users.
- Led a team of 2 interns in developing a Log Analyzer for automatic detection of call-drops using system logs, and reduced ticket turn-around time by 30%.

September 2019–June 2020
Bengaluru, India

INTERNSHIP EXPERIENCE

Siemens Healthineers, Software Development Intern

- Created a tool to monitor 72+ test agents' health, reducing QA manual efforts by 10% approx.
- Formulated SSE-based protocols for network calls in test agents, resulting in 0 polling traffic.

January 2019–May 2019
Bengaluru, India

Philips Research India, Summer Research Intern

- Constructed e2e deep learning models to detect brain hemorrhage in CT scans, and validated models through reconstruction techniques like class-activation heat maps.
- Leveraged pre-processing models (auto-encoders), and improved previous performance by 30%.

June 2018–July 2018
Bengaluru, India

PUBLICATIONS

An Apriori Method for Topic Extraction from Text Files,

International Journal of Recent Technology and Engineering (IJRTE)

July 2019

SKILLS

ML Frameworks & Libraries: Tensorflow, Keras, Pytorch, Weka, Sklearn, Scipy, Amazon Sagemaker

Programming Languages: Python, Java, JavaScript, SQL

Environments & Frameworks: Linux OS | AWS - Lambda, EMR, Sagemaker, API Gateway | GCP - Firebase, BigQuery

Cloud: AWS, GCP

ACADEMIC PROJECTS

Cyberbullying Detection, 3 member team | Python, NLP, CV, Multimodal

- Developed a multi-modal ensemble model to detect cyberbullying in social media posts, implemented complete text model stack with 0.90 F1

May 2019

Length of Stay in ICU Predictor, 4 member team | Philips Hackabout | Python, Time-series, Ensemble

- Delivered a model ensemble to predict length of stay of patients in ICU with 0.17 day MAE.
- Invented multi-hot-encoding technique reducing training time from 20 min -> 45 sec / epoch (2000%)
- Drafted outlier pruning strategy improving model performance by 50%.

October 2017

CERTIFICATIONS

Natural Language Processing (Amazon MLU)

Computer Vision (Amazon MLU)
Machine Learning (Coursera)

Deep Learning Specialization (Coursera)
Building Recommender Systems (Udemy)

AWARDS

- **Top 5 Submission (out of 200+)** - Fraud Detection Challenge, Amazon Machine Learning University
- **Rank #3 in Bachelor of Engineering - Computer Science & Engineering**, SJCE Mysuru
- **Winner - Philips Hackabout 2017**, Philips Research India

LEADERSHIP & INVOLVEMENT

- **Technical Co-ordinator**, Linux Campus Club, SJCE
- **Mentoring Interns**, Motorola Mobility – 2 | Amazon – 1
- **Tutoring & Mentoring**, Learn-Python, Learn-Machine Learning (Educational program from LCC-SJCE for over 140 students)