

KRISHNADITYA KANCHARLA

krishnaditya4@gmail.com | linkedin.com/in/krishna-kancharla/ | github.com/krishnakancharla

EDUCATION

Sardar Patel Institute Of Technology, Mumbai, India **May 2019**
Secured Bachelor of Electronics and Telecommunication Engineering **(GPA: 7.8/10)**
Coursework: Neural Networks & Fuzzy Logic, Object Oriented Programming using Java, Computer Communication & Networking, Image & Video Processing, and Operating Systems

EXPERIENCE

Amazon Web Services (AWS), Bengaluru, India **Jul 2019 – Present**
Cloud Engineer - I (DevOps) - AWS Premium Support

- Analysing resource metrics and log dumps for fault localization and performance optimization of DevOps infrastructure hosted on AWS
- Providing Architectural Guidance on deploying Machine Learning Pipelines for business-critical workloads on AWS ECS, Fargate and AWS Batch
- Overseeing Enterprise Escalations to identify, assess and mitigate production impact issues pertaining to application deployment services of AWS
- Developed programs for monitoring and analysing the performance of an internal application as a part of the Core Software Development Team for Internal Projects, thereby optimized application uptime by 40%

Headstrait Software, Mumbai, India **Dec 2018 – Feb 2019**
Data Scientist – Intern

- Performed Exploratory Data Analysis on historical data of all cricket matches played between 2000 and 2010 by developing scripts on Python (Pandas, NumPy, and Matplotlib)
- Implemented a Gaussian Mixture Model (GMM) clustering algorithm to identify batsmen with similar batting styles to aid in player substitution or player auctions in leagues
- Achieved **94.5%** accuracy while predicting the final score that Team A attains against Team B in a specific venue based on historical data by implementing multi-variate regression
- Developed a Convolutional Neural Network using Tensorflow for facial recognition of popular cricket players using Principal Component Analysis for feature extraction

IBM India, Mumbai, India **Jun 2017 – Jul 2017**
Summer Intern

- Analysed downtime reports for proactive fault prediction and predictive maintenance, and configured Fault Tolerant DHCP and DNS servers using Bash scripts
- Implemented Dynamic NAT by configuring NAT routers to dynamically allocate public IPs, from an address pool, to devices in a private network thereby enabling them to communicate with the public network

Sardar Patel Institute Of Technology, Mumbai, India **Jul 2017 – May 2019**
Undergraduate Teaching Assistant – Applied Mathematics

- Supported as a Teaching Assistant under Professor Nida Bakereywalla for Applied Mathematics - I, II and III
- Contributed to logistics of the courses by preparing assignments and grading tutorials, and conducted extra lectures, doubt sessions on topics such as Probability Distribution and Calculus of Vectors for students
- Curated problem sets and question banks for freshman and sophomore year students

PROJECTS

Application Performance Data Analysis – AWS Internal Project

- Developed a program to extract performance metric data of an application and publish it to AWS CloudWatch on a real time basis and visualized the data as time series plots to aid in identifying performance blockers
- Created triggers using AWS Lambda to initiate remediation actions based on the real time metric data to improve application uptime by 40%
- Technologies used: Python (Seaborn, Pandas, Boto3), AWS CloudWatch, and AWS DynamoDB

Handwritten Signature Recognition System

- Developed a CNN as a multi-class classifier to recognize the author of a signature based on an input image
- Implemented image pre-processing algorithms using OpenCV for noise removal and data preparation
- Awarded 2nd Prize in Departmental Project competition during sixth semester of engineering for the project
- Co-authored a paper on the same. Presented and published it in IEEE International Conference on Advanced Computation and Telecommunication (ICACAT), Bhopal, India, 2018, pp. 1-5, DOI: 10.1109/ICACAT.2018.8933575

Image Captioning System using Deep Learning

- Designed an Encoder-Decoder Neural Network Architecture which generates a Grammatically Accurate Caption to describe an Input Image
- Developed a CNN as the encoder for feature extraction which encodes the image as a feature vector and LSTM as a decoder to generate a caption based on the feature vector

NFC based security system

- Programmed a microcontroller(ATMEGA-8 IC) to read content of a NFC tag serially using RDM6300 tag reader module, which would then grant an access once the read content matches with the database
- Awarded 1st Prize in the Departmental Project competition during fifth semester of engineering

SKILLS AND CERTIFICATIONS

- **Programming languages:** Python, Java, C, and Golang
- **Other Technologies:** SQL, Tensorflow, Docker, Kubernetes, PyTorch, AWS SDK, and Git
- **AWS Services:** EC2, ECS, CloudFormation, Batch, Beanstalk, VPC, DynamoDB, S3, API Gateway, IAM, and CloudWatch
- **Certifications:** AWS Certified Solutions Architect- Associate (SAA-CO1) and Deep Learning Specialisation

ACCOLADES, LEADERSHIP & VOLUNTEERING EXPERIENCE

- Taught underprivileged school students and helped prepare them for competitive examinations as a Mathematics Teacher at 'Abhyudaya' in from May 2018 to May 2019
- Awarded the 'Elite & Gold' certificate for achieving a rank among the top 5% of students for the nationwide examination of 'Data Structures and Algorithms using Python course' conducted by IIT Madras in 2017
- Spearheaded the operations of the sponsorship team of the IEEE Student chapter for the IEEE International Symposium on IoT in 2016