Suraj Tripathy

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https://surajtripathy.github.io/portfolio/

EDUCATION

Stony Brook University   New York, USA
Master of Science in Computer Engineering   *2021 – Present*

IIIT Bhubaneswar   Bhubaneswar, India
Bachelor of Technology in Electronics and Telecommunication Engineering   *2015 – 2019*

EXPERIENCE

Python Developer Engineer   Feb 2021 – July 2021
Animaker Inc.   *Bangalore, India*
- Built custom Thumbor implementation for dynamic watermark filter
- Re-designed the authentication flow for dashboard APIs and added extra time based security
- Designed and implemented api-secret based access for 3rd party integrations with Hubspot and Salesforce
- Designed system wide event triggering and storing pub/sub architecture using Kafka.
- Created system wide webhook integration system for event triggering
- Added provisions to provide "guides" to new users

Software Engineer   Jan 2020 – Feb 2021
GeoSpark (now Roam.ai)   *Bangalore, India*
- Built the GeoSpark Python SDK based on pub/sub architecture from scratch and was responsible for maintaining it at PyPI
- Re-engineered the pipeline for server side location updates from devices using AWS IoT and Kinesis data streams.
- Implemented "Smart Home and Work detection" API which has more than 10K requests per month
- Implemented "Nearby" API which allows users to fetch nearby users within a radius
- Introduced a Kalman filter based dynamic position estimation algorithm which improved the location accuracy by 20% under poor-GPS conditions
- Initiated a custom snap-to-road location matching algorithm based on OSRM services which reduced location drifts by 35%
- Implemented a custom location visualization tool based on Kepler.gl for data visualization of internal team.
- Implemented S2S Event logging for internal Data Attribution, User management, Digital targeting in AppsFlyer, Branch, Clevertap, Adjust
- Established business rules for User Suspension, Customer ticket reduction
- Implemented a Spring-boot based micro-service to send and receive messages and events to and from a Kafka Cluster deployed in EC2 instance
- Enabled Kafka-connect service to log events to AWS S3

Associate System Engineer   July 2019 – Jan 2020
IBM   *Bangalore, India*
- Trained as a SAP MM Package Specialist

SKILLS

Languages: Python, Java
Frameworks: Django, Flask, Spring Boot
Databases:: MySQL, MongoDB, Redis, Elasticsearch
Cloud Technologies:: AWS S3, AWS EC2, AWS Lambda, AWS Elasticache, AWS IoT
Developer Tools: Git, VSCode, PyCharm, IntelliJ, Postman, Robo3t, Kibana, Docker
Libraries: Pandas, PyMongo, Scikit-Learn, OpenCV, Deep Leaning with TensorFlow

PUBLICATIONS

1. S. Tripathy, R. Sahoo, A. K. Dash and D. P. Dogra, "Natural Gestures to Interact with 3D Virtual Objects using Deep Learning Framework," TENCON 2019 - 2019 IEEE Region 10 Conference (TENCON), Kochi, India, 2019, pp. 1363-1368, doi: 10.1109/TENCON.2019.8929637.