# BANSIKUMAR MENDAPARA

San Diego, CA 92115 | Mobile: (908) 608 4326 | Email: bansimendapara53@gmail.com
LinkedIn: https://www.linkedin.com/in/bansi-mendapara

## EDUCATION

**Master of Science - Computer Science** GPA: 3.95 **Expected May 2021**
**San Diego State University** San Diego, CA, USA

**Bachelor of Engineering - Information Technology** CPI: 8.08 **June 2019**
**Gujarat Technological University** Gujarat, India

## SKILLS

| | |
|---|---|
| Programming Languages: | Python, Java, C, C++ |
| AWS: | EC2, S3, RDS, SNS, Lambda, ELB, ASG, VPC, FSx, Directory Service, Workspaces |
| Machine Learning: | Logistic Regression, Linear Regression, KNN, SVM, CNN, RNN |
| Database: | MySQL, NoSQL |
| IDE: | Jupyter Notebook, Spyder, Net Beans, VS Code |
| Web Technologies: | JavaScript, Bootstrap, CSS, HTML |

## PROJECTS

**AWS Theme Park - Serverless Web Application |** AWS Amplify, AWS SAM, Amazon QuickSight, AWS Lambda

- Configured **Amplify** to publish the web app and deployed the backend infrastructure using **SAM**.
- Populated a **DynamoDB** table containing ride and attraction information for the park.
- Launched **Amazon Kinesis Firehose delivery stream** to ingest data of park visitors and designed **QuickSight** to perform business intelligence analytics.
- Introduced Amazon **EventBridge**, CloudWatch and SNS to notify ride system outages.

**Hybrid Directory and Migration |** AWS Directory Service, AWS Workspaces, AWS FSx, VPC Peering

- Simulated On-premises environment in AWS which had windows server running as **Domain Controllers** (Self Managed On-premises Active Directory), file server and simulated client desktop.
- Created AWS VPC with a **VPC peer** between AWS and simulated On-premises to simulate a VPN/DX.
- Set up AWS managed Microsoft AD and built **two way forest trust** between AWS and On-premises.
- Launched **AWS FSx** and explored DFS Namespaces.
- Completed migration by launching AWS **Workspaces** and granted access to an On-premises identity.

**Ship Detection in Satellite Image |** Tensorflow, Scikit-learn, CNN, SVM, Pandas, Matplotlib, Python

- Executed **feature extraction** using **Histogram of Oriented Gradients** (HOG) technique.
- Designed and developed model using 3 different algorithms CNN, VGG16 and SVM.
- Analyzed and optimized machine learning models using **hyper parameter tuning** with **100% recall**.

**SMS Spam/Ham Classification |** Tensorflow, RNN, KNN, SVM, Matplotlib, Python

- Identified frequent words in Spam/Ham message, implemented **tokenizer** to tokenize data and converted into same length sequence.
- Applied 3 machine learning models Recurrent Neural Network, K-Nearest Neighbor and SVM.
- Achieved better results and applied hyper parameter tuning using **GridSearchCV**.

**Lung Cancer Detection |** SVM, Matplotlib, Python, MATLAB

- Converted images into grayscale format and performed **dimensionality reduction**.
- Preprocessed dataset by various techniques like thresholding, filtering, masking and segmentation.
- Developed model using **Support Vector Machine** algorithm and classified images into 2 category.
- Secured **2nd rank** in Project Exhibition.

## CERTIFICATION

- AWS Certified Solutions Architect Associate
- AWS Certified Cloud Practitioner
- Oracle Cloud Infrastructure Foundations 2020 Certified Associate