# ANAND SAI MISHRA

Los Angeles, California, USA

Phone: 424-375-4284 Email: anandsai.mishra@gmail.com Linkedin:anandsaimishra GitHub:anandsaimishra

### **EDUCATION**

Master of Science, Computer Science

Aug 2018 - Current

California State University, Dominguez Hills (Graduating: December 2020)

Bachelor of Technology, Computer Science and Engineering

July 2013 - June 2018

National Institute of Technology Rourkela, Odisha, India

#### CORE COMPETENCIES AND SKILLS

**Programming Languages** Python, JavaScript C, C++, Swift, HTML.

**DevOps**SDLC, Object-Oriented Design, Agile Development, Git**Platforms**Angular, Rest API, Wordpress, LINUX Bash, BERT.

Frameworks YOLOv3, TensorFlow, PyTorch, SciPy, Keras, Mininet, RYU.
Cloud Tools Terraform, EC2, Ansible, Route53, GitLab, Docker, CI/CD.

Tools and testing Gremlin, DataDog, Sentry, ELK.

Non-Technical Multilingual, International Student, Photographer, IEEE Member: 97240149

#### WORK EXPERIENCE

# Adjunct Lecturer of Computer Science at CSU Dominguez Hills

Sept 2019 - Current

- Developed courses that involved subjects like *Operating Systems and Networks (CTC228)*, Computer Forensics and Investigation (CTC328) & *Advanced Database Management Systems (CSC553)*.
- Taught topics like virtualization, file management systems, Process handling, networking layers network security, Database Management, Data Analytics and Optimization usage of Artificial Intelligence in security and modern data center optimization.
- Researched on various Computer Networking and Data Optimization techniques.
- Helped develop the coursework for subjects like IOS Programming.

#### IOS Application Developer at CodePath

June 2020 - Current

- Designed multiple IOS applications that included Twitter Client application, Movie review Application and Restaurant Review Application.
- Designed a COVID Screening application that gives the user determine if he/she needs to isolate themselves based on the self reported conditions using SWIFT 5 and AlamoFire.
- Taught students from undergraduate and graduate background on various software development methodologies of developing an application for the Apple Ecosystem.

# Graduate Research Assistantship at CEIE, CSU Dominguez Hills

Feb 2019 - August 2020

- Implemented a system of Database for the incoming students which replaced the existing filing systems.
- Improved the efficiency of the office and reduced the time required to process requests from students by 2 days.
- Reduced the time required to process admission documents by 3 days.
- Implemented ML-based prediction algorithms to predict and focus the advertisements to high yield areas for International Student Admissions.

### Corporate Data Analytics Intern at Neyveli Lignite Corporation

May 2016 - June 2016

- Worked on Corporate System Administration, Network Management.
- Optimized the Industrial and Power-plant Data Collection and Analysis.
- Maintenance of Enterprise's Resource Management Software.
- Implemented the network backbone in the industry improving the network efficiency by 50%.

#### PROJECTS AND ACADEMIC EXPERIENCE

### Handwriting Recognition for numbers in Roman Script [GitHub]

June 2020

Developed an ML and Artificial Neural Network powered handwriting detection system using TensorFlow Framework and Keras Backend to enable handwriting recognition with 99% accuracy.

# IMDB - Movie Review sentiment analyser [GitHub]

June 2020

Developed a TensorFlow and Keras(Backend) powered sentiment analyzer that can detect if the review left for a particular movie is good or bad based on the terms used in the Review. It uses Word Embedding for the mapping.

# Real-Time Object Detection using YOLO v3

Dec 2019

Developed projects and researched about real-time object detection on camera feed and implement it for self-driving situations such as on-road situation and pedestrian detection.

# Improving Sentiment Analysis using Emotion Detection

Nov 2020

This project is developed using PyTorch and BERT. It is posed and developed with the goal to detect and classify early detection of Depression in teenagers. With the current teens choosing to use texting based communication more than audio or video based communication. It makes it important for us to be able to detect the emotions from written words. Hence this project attempts to detect the early signs of depression using Natural Language processing and Bidirectional Classifier.

Machine Learning based Implementation of the shortest-path algorithm in data-center Aug 2019

Developed VM, MB and VM-MB based algorithms for middle-box placements in a k-array data center.

Asynchronous Cryptography based Inter-Vehicular Ad-Hoc Message Authentication

Aug 2019

Worked on a research project based on using asynchronous methods to authenticate messages being passed between various vehicles and posts appointed at the roads for guidence and updates.

# Lwitter - Twitter Client using Twitter API (IOS Application) [GitHub]

May 2018

Built on Xcode 12, AlamoFire and Twitter Official API to build a twitter Client that can serve as the main twitter client for users.

# AR and ML based Clipboard sharing Application

June 2020

Built on Xcode 12, This application uses the iPhone camera sensor to scan things in the physical plane and paste it on the computer word document using the Apple Universal Clipboard.

### Home Media Center based on RPi 4

May 2020

Developed a personal streaming system using RPi4 and Linux. It is used to broadcast various streaming services straight to my TV.

# **DEVOPS AND CLOUD PROJECTS**

#### Deployed Remote Lab in AWS for students to access

September 2020

While teaching Computer Networks during the lockdown period we couldn't use the physical labs. Hence I used Terraform as the infrastructure provisioning tool alongside AWS CloudFormation and Ansible as the configuration tool to create a virtual lab with linux VM's for students to practice their skills in networking technology.

### Cloud Resume Challenge

December 2020

[Link to Resume] I created a static resume site using HTML/CSS and hosted it on a personal server on my private domain using AWS tools such as Route 53, S3 and CloudFront. Also used AWS certification manager to secure the website using SSL certificates and security standards. It used the CI/CD using GitLab and CDN using CloudFront.

### Chaos Engineering: Gremlin tool utilization

December 2020

This project involved running a web-server on EC2 and testing Chaos Engineering Principles on it. Creating a DynamoDB instance containing resources for the web-page. Created a IAM role with AdministratorAccess Privileges to use the service. Then installed Gremlin agent on the web-server and attacked the web-server with CPU, Network and Process overloading attacks to see the effects. From this project I learnt the effects of various attacks on the Cloud resources.

### Deployment in Google Kubernetes Engine

December 2020

This project was developed in an attempt to gain hands on experience in Google Cloud Platform specifically Docker, Google Kubernetes Engine, NGINX Hosting and CI/CD Pipelines. Deployed an existing web page using containers in the GKE and used all of the backing of a gaint CI/CD network on GCP.

# LEADERSHIP SKILLS

### International Student Representative, Associated Students Inc.

Feb 2019

Represented the international student interests and queries at the Board of Directors at the university and advocated for the rights and interests of the International Students.

### Project Manager, International Student Services

March 2019

Worked on developing the new state of the art Student management system and led a team of 4 developers following

