# **Amitash Nanda**

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S amitashnanda.github.io

#### **EDUCATION**

#### **University of California San Diego** 0

- M.S. in Electrical and Computer Engineering, GPA 3.65/4
- Coursework: Statistical Learning, Principles of AI, Sensing and Estimation in Robotics, Linear Algebra
- Research Interest : Software Development, Computational Analysis, Machine Learning, Deep Learning, Data Analysis

#### **College of Engineering and Technology**

0 B.Tech. in Instrumentation and Electronics Engineering, GPA - 8.60/10.0

## **TECHNICAL SKILLS**

- **Programming Languages:** Python, C/C++, HTML, CSS, JavaScript 0
- Libraries: PyTorch, TensorFlow, Scikit-learn, Pandas, OpenCV, Numpy, Matplotlib, Keras, Flask, NetworkX, Bokeh 0
- Frameworks, and Simulator: Jupyter, PyQt, Tkinter, Gazebo, V-Rep, RViz, SLAM, GMapping, Blender 3D 0
- Database, Tools, and Cloud: SQL, MongoDB, &TFX, Git, Tableau, Informatica, Colab, Kaggle, AWS S3 0

## PROFESSIONAL EXPERIENCE

- University of California San Diego Boolean Lab 0 Graduate Student Researcher
  - Working on processing, visualizing, and performing computational analysis on biological datasets (Macrophage, Neuroblastoma)
  - Performing research on significance of synthetic data in machine learning and deep learning for healthcare and robotics.

### Salk Institute of Biological Studies, San Diego - Panda Lab

- 0 **Research & Development Volunteer** 
  - Developed and analysed food network models with circadian stability under supervision of Dr. Satchidananda Panda.

### Accenture - Application Engineering R&D

#### 0 Software Engineer

- Researched and devised a state-of-the-art novel chaotic testing application to test robustness of a robot system.
- Contributed to backend GUI design, implemented Gazebo-ROS functionalities, and integrated on AWS S3 and RoboMaker.

#### **Accenture - Industry X Services** 0

#### Associate Software Engineer

- Automated end-to-end user stories of Airbus Product Life Cycle Management using Image and Text-based recognition.
- Used the 3DEXPERIENCE platform from Dassault Systemes to create products and services using virtual experiences.
- Accomplished customization and integration of PLM functionalities using RESTful web services and Apache Cordova.

## PROJECTS

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#### OrgaLearn: An organoid mining technique 0

- A Novel Deep Learning Scheme to investigate organoid in real-time
- Researching to improve the OrgaQuant model built by MIT developing better functionalities and features.

### **Chaos Robo - A novel chaotic testing application**

- Chaos Engineering implementation to develop a fault tolerant robot application
- Designed and developed perturbation, node kill, add objects, and latency functionalities for robot chaos testing application.

### Plant sustainability enhancement using deep learning techniques

- Efficient ResNet-CNN model for health classification of plant saplings
- Collaborated and developed an autonomous, robust, and non-contact system for saplings to monitor growth, vicinity, and health conditions using ResNet-CNN and MQTT IoT protocol.

## PUBLICATIONS

- A Nanda, et al., "Computer Vision Assisted Autonomous Intra Row Weeder", ICIT (IEEE), 2018 0
- A Nanda, et al., "sTransporter", ICACCS, IEEE, 2020 0

## Aug 2015 - May 2019

#### San Diego, California Sept 2021 - Present

## May - Aug 2021

Bengaluru, India

### Bengaluru, India

Jun 2019 - Aug 2020

Oct 2021 - Present

UCSD, Boolean Lab

#### **Accenture Labs** Aug 2020 - Aug 2021

#### **CET, BBSR**

Apr 2019 - Jul 2020

Sept 2020 - Aug 2021

Remote, India

San Diego, California Expected June 2023

Bhubaneswar, India

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