

Aditya Thakur

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EDUCATION

New York University

NY, US

Master of Science, Computer Engineering (CGPA: 3.6)

Sep 2021 - May 2023

Relevant Coursework: Machine Learning, Computing System Architecture, High-Performance Computing for Machine Learning, Deep Learning

SRM Institute of Science and Technology

Chennai, India

Bachelor of Technology, Electronics and Communication Engineering (CGPA: 3.5)

Jul 2014 - May 2018

Relevant Coursework: Database Concepts, Data Structures and Algorithms in Python, Computer Networks, Microprocessors and Microcontrollers, Object-Oriented Programming, Digital Signal Processing

TECHNICAL SKILLS

Languages: Python, C/C++, SQL, ABAP, Java, MATLAB

Tools & Frameworks: Pytorch, Git, Jira, AWS Lambda, VS Code, Pytest, pandas, NumPy, Matplotlib, UNIX, CUDA

EXPERIENCE

SAP Labs India

Oct 2019 - Aug 2021

Developer Associate [ABAP, SAP UI5, OData Services, REST API, Object Oriented Programming]

- Developed server-side application in **S/4HANA On-Premise and Cloud** system for multiple features using interactive Reports, Interfaces, Remote Function Calls and Web Dynpro (UI).
- **Enhanced the data model** for Employee-Business Partner Integration to handle extended features such as Contingent Worker Management and Concurrent-Employment.
- Contributed towards complete **Software Development Life Cycle (SDLC)** for Employee integration in HCM suite including Architecture, Design, Development, Testing and Enhancement.
- Implemented a proof of concept involving creation and consumption of **REST APIs using OData** services for processing of time-domain sensor data to generate usage-based billing.
- Created robust unit tests, test plan & developed scripts for automated tests. **Reduced bugs by 60%** in production.

Broadcom Inc.

Jun 2018 - Oct 2019

Software Engineer [Python, C/C++, Shell Scripting, Linux]

- Executed performance & feature validation, aiding to bug fix and errorless release to customer for BCM4375, world's first WiFi6 (802.11ax) chip for phones.
- Developed **Python-based test automation** for issue analysis, **jira** creation & concurrent execution on multiple systems, increasing the test coverage by over **400%**.
- Contributed to Development and automated tests for 'Wi-Fi Protected Access 3' (WPA-3) WLAN security protocol as per new standards in WPA3 -SAE and OWE.

PROJECTS

Profiling and Optimization of ResNet performance on CPU and GPU

Feb 2022

- Analyzed data-loading and training methods of a ResNet18 model on a single node quad-core CPU.
- Profiling SGD and ADAM optimizers performance for 5 epochs and 100 epochs of training and compared the performance.

Inventory Management SaaS Application

Dec 2021

- Developed serverless inventory management application using AWS Lambda and AWS API gateway.
- Created APIs using on AWS for database operations on AWS S3 storage.

Smart Surveillance - SAP Labs India

Jul 2020 - Aug 2020

- Designed an accident reporting system using **CNN** for classifying frames, achieving an **accuracy of 92%**
- Developed a web app using the **Flask framework** for calling the classifier API and sending e-mail notifications.

Solar-Electric Vehicle (Team ETROS) - Electrical and Coding Lead

Sep 2016 - Apr 2018

- Led the development of electrical subsystem comprising of controllers, battery, motor, sensors & other peripherals.
- Worked on interactive dashboard & enabling **real-time data sharing** of vehicle statistics and location.
- Implemented a system to detect driver fatigue and microsleep using **computer vision**.

AWARDS

Winner – NYU Tandon Made Challenge - Awarded USD 1000 to prototype the proposed idea, August 2021

Academic Merit Scholarship - Awarded a scholarship of USD 10k/per year from New York University, April 2021

SAP Catalyst 2020, a global accelerated leadership recognition program at SAP, October 2020

Best Innovation Prize (Nationally) at Electric Solar Vehicle Championship, March 2018

2nd Runner up (Nationally) at Indo-Asian Solar Challenge for Electric Vehicle design (Team ETROS), April 2017