Shivani Modi

Bangalore, India · +919591367814 · shivanimodi16@gmail.com · LinkedIn · Project Manas

---

EDUCATION

2014-2018   **MANIPAL INSTITUTE OF TECHNOLOGY,** Manipal, Karnataka/India   GPA 8.72/10

*Bachelor of Technology in Computer Science and Engineering (**Minor: Information Management and Analytics**)*

Data Structure, Operating Systems, Advanced Database Systems, Big Data Analytics, Business Intelligence and Application, Data Warehousing and Data Mining, Information Retrieval, Product Development, and Marketing

---

EXPERIENCE

SAP Labs India | *Technology Consultant and Software Developer* | Bangalore, India   July 2018 - Present
- Responsible for Innovation Backlogs of Contract to Revenue products.
  - Developed a digital assistant to automate the business process in Contract to Revenue IT products. (Java, Python, HANA)
  - Designed the model to convert legal contract PDF files into a digitized format that can be organized and queried for contract-related insights. (Jenkins, Python, Cloud Foundry, SAP Fiori, Docker, Fast.AI)
  - Built a model and an application for customer ranking in the cash collection process of FICA. (SAP Fiori, Python, oData)

SAP ARIBA | *INTERN* | Bangalore, India   Jan 2018 - June 2018
- Formulated and implemented a recommendation system by using one-shot learning, deep learning and NLP stack for service requisition process. (Siamese Network, word2vec, LSTM)
  - Designed an offline module to compute Fspace representation and reduced runtime to 2 seconds by using broadcasting.
  - Integrated the model in the guided buying system using AngularJS, Maven, and REST calls.
  - The project is submitted for patent filing.

Amazon Cloudtail India Pvt Ltd | *INTERN* | Bangalore, India   May 2017 - June 2017
- Worked on Pricing data collection, retrieval, and indexes for data warehousing on AWS platforms.
- Developed a module to automate the loading of data from cloud storage S3 to Redshift using Python.

ENGINEERING PROJECTS

PROJECT MANAS | *AI Head* | Manipal, India   Oct 2015 - Oct 2016
- Project MANAS is the official AI and Robotics team of MAHE, Manipal aiming to build a driverless car.
  - Organized workshops on robotics and programming for female undergraduate students to increase their participation.
  - Developed models and ROS packages for lane, sign, and pedestrian detection adaptable to Indian roads using Transfer Learning with Deep Learning. (C++ and Python)
  - Worked on the Acquisition and filtering of data from 2D Lidar**.** (Gazebo, ROS)
- Created a game server for a networked multiplayer game of battleship using socket programming. (C)
- Derived and implemented a formula to calculate the balance index set of a generic graph using parallel programming. (MPI and OpenCL)
- Created a placement portal to facilitate job search for students according to their qualifications. (SQL, HTML, PHP, CSS)
- Compared MySql, Cassandra and Apache Parquet data models across performance metrics and developed a website using Cassandra.

SKILLS

LANGUAGES: C, C++, Python, Java, AngularJS, HTML, CSS, PHP, OpenCL, SQL

TECHNOLOGIES: GITHUB, CUDA, ROS, HANA PAL, AWS, AZURE, MONGODB, WEKA, JENKINS, CLOUD FOUNDRY, ODATA, DOCKER

LIBRARIES : FAST AI**,** TENSORFLOW, PYTORCH, KERAS, SCIKIT-LEARN, NUMPY, PANDAS, JUPYTER, OPENCV, FLASK

RESEARCH AND PUBLICATIONS

Classification and Comparison of Malignancy Detection of Cervical Cells Based on Nucleus and Textural Features in Microscopic Images of Uterine Cervix.   **International Journal of Medical Engineering and Informatics - 2019**

Prediction of drugs for diabetes while avoiding overdosing and minimizing drug-drug interactions.   **ICASET 2017, MJST 2018**

ACHIEVEMENTS

- Winner of SAP Design the Future: NextLevel IT Hackathon 2018. Project to automate the process required for fiscal compliance by reduction of manual efforts in terms of tax calculation and reduction.
- Idea selected and granted funding from 118 ideas submitted at CreativeIT hackathon 2019 conducted by SAP in Waldorf.
- Identified as an SAP Catalyst by the management for 2019 - 2020.
- Project Manas is among 13 teams that qualified for the million-dollar Mahindra's Rise Prize challenge and won the Lescoe Cup at the Intelligent Ground Vehicle Competition held in Michigan.
- Secured 2nd position in University's technical fest - Disabled Security for making eye controlled wheelchair prototype.
- Completed the requirements to be recognized as a Microsoft Technology Associate:Database Fundamentals.