

# Daanish Goyal

Portfolio: daanishgoyal.com

Linkedin: linkedin.com/in/daanishgoyal

Email: dg5052@gmail.com

Github: github.com/daanishgoyal

Mobile: 352-888-3588

## EXPERIENCE

- **Software Development Engineer Intern** Franklin, Tennessee  
*Aitudier* June 2022 - August 2022
  - Collaborated in designing and implementing a Learning Management System and created **RESTful APIs** in Python using **Flask** for desired front-end integration.
  - Implemented an auto-scaling and flexible cloud system by deploying web app using **EC2, VPC, RDS** and configured IAM roles to control **AWS** users and groups.
  - Defined automation and engineered CI/CD pipeline from scratch to migrate application to DevOps standard.
- **iOS Software Development Intern** Delhi, India  
*Neo Sypher Systems Pvt. Ltd.* May 2019 - July 2019
  - Designed the User-Interface with **SwiftUI** and delivered RESTful API endpoints for an iOS Dictionary mobile application.
  - Tested and optimized performance by reducing **55%** of load time and occasional lag through implementation of efficient code optimizations and profiling techniques.

## EDUCATION

- **University Of Florida** Gainesville, Florida  
*Master of Science - Computer Science; GPA: 3.45* August 2021 - December 2022  
*Courses:* Analysis of Algorithms, Database Management Systems, Distributed Operating System Principles, Computer And Network Security, Software Engineering, Math For Intelligent Systems, Digital Health, Human-Computer Interaction.
- **Manipal University** Jaipur, India  
*Bachelor of Technology - Computer and Communication Engineering; GPA: 3.33* July 2017 - May 2021  
*Courses:* Operating Systems, Data Structures and Algorithms, Cryptography and Security, Programming using C, Java Programming, Computer Architecture, Wireless Sensor/Adhoc Networks, Automata Theory.

## PROJECTS

- **MyLearning Place**(ReactJS, GO, MySQL, HTML, CSS)
  - Led a team of 4 to create a full-stack web application in an **agile** environment, followed and applied **HCI eight golden** design rules.
  - Instituted API endpoints, administered and maintained database, ran Unit and Cypress tests to deliver high-quality code and assisted with set up of **Docker** containers for deployment into Kubernetes Pods.
- **Twitter Simulator**(F#, AKKA.net, WebSharper, JSON, HTML, CSS)
  - Constructed a distributed client/server identical to Twitter utilizing Akka framework in F#, harnessing power of **Actor Modeling** to achieve concurrency.
  - Devised a JSON based API/website using WebSharper to implement the WebSocket interface.
  - Computed and enhanced performance by **35%** through optimization and remodelling of actor model to simulate more than 100,000 users at once with load distributed across servers.
- **Maternal Health Risk Prediction**(Python, Numpy, Pandas, Scikit-learn)
  - Developed a Maternal Health Risk **prediction model** using various **machine learning classifiers**, and evaluated performance based on their accuracy, precision, recall, and F1 score.
  - Applied **feature selection** techniques such as Forward Selection, Information Gain, and Correlation Coefficient for assessing **determinants** of maternal health, achieving an accuracy of 87.49%
- **Vancouver Crime Trend Analyzer**(SQL, OracleDB, PHP, ChartJS)
  - Designed & developed web interfaces to project complex SQL trend queries, from a real-time large scale Oracle database (upwards of **250,000 tuples**) focusing on retrieving new information from data set.
  - Interpreted and operated on real-life crime data provided by Vancouver city police department to discover numerous **meaningful trends** and further projected data-points by leveraging libraries like **ChartJS**.

## TECHNICAL SKILLS

- **Languages** Python, Java, C/C++, Go, Swift, F#, Linux, SQL, Julia
- **Frameworks** Scikit-learn, Numpy, Pandas, TensorFlow, Django, Flask, NodeJS, ReactJS
- **Tools** Kubernetes, Docker, GIT, PostgreSQL, MySQL, SQLite, AWS

## PUBLICATIONS

- Cost Aware BAT Algorithm for Task Scheduling in Cloud Computing - ICRIC2021, Innovation Patent by the Australian Government.