# Daanish Goyal

Linkedin: linkedin.com/in/daanishgoyal
Github: github.com/daanishgoyal

Email: dg5052@gmail.com
Mobile: 352-888-3588

## 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.*

## 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.

## 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.

- **Bit torrent Simulator***(Java, Socket Programming)*
  - Developed a **P2P** file-sharing system, using **TCP/IP** protocols, handshaking and bit-fields to track different pieces in peers.
  - Deployed efficient and industrial level code to make program robust and reduce execution time by **20%** on remote linux servers situated in a different country.
  - Incorporated special message types to choke, un-choke thereby increasing download speeds up to **50%**.

- **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.