# Aman Saxena

amansaxena2002@gmail.com | www.linkedin.com/in/aman-saxena-ba000b212 | Edison, New Jersey | https://aman-dev-13a2b.web.app

## Skills

Tools/ Methodologies: Google Cloud Platform | Scrum | Kanban | Agile | DBeaver | PostgreSQL/ MySQL | Scikit Learn | Git/Github | AWS | Node | React | Express | Django | Pandas | Numpy | POSIX/UNIX | Linux | Flutter | Firebase

Languages: Javascript | Java | Python | C | C++ | HTML | CSS | Dart | Verilog HDL | RISC-V | x86-64 Assembly | MATLAB | Verilog HDL

## Professional Experience

### GLogic — Remote

*Full Stack Development Intern* — *June 2023 - June 2024*

- Deployed dynamic webpages for a **Google Cloud Platform** based business automation platform serving healthcare clients. Utilized frameworks such as **ReactJS**, **HTML, JS, CSS,** and **ExpressJS**.
- Implemented styles and event-driven functionality using libraries such as **Material UI** ensuring a seamless and responsive user experience. Managed version control and collaboration using **Git/Github**.
- Created new **REST** APIs, constructed new database schema using **PostgreSQL** and created data routes, serializers using **Django** framework.

### TVD Associates / Rutgers MBS Externship Program — Edison, NJ

*Lead Research Extern - Data Analytics* — *Sept 2022 - Dec 2022*

- Conducted research on member organizations and their involvement with the firm.
- Designed a rubric and a scoring system using **Microsoft Excel** to rate/ score the interaction between the firm and its members.
- Organized meeting sessions and built objectives for a collective and motivating work environment for the team.
- Promptly responded to requirements and planned changes to existing developments in collaboration with the team.

## Education

### Rutgers University

*Bachelor of Science - Computer Engineering* — *Sept 2020 - May 2024*

*Minor - Computer Science*

- Cumulative GPA: 3.64
- **Dean's List** throughout 2020-2023.
- Relevant Coursework: Intro to MATLAB, Programming Methodology I / **C++**, Programming Methodology II (**Data Structures and Algorithms**), **Computer Architecture (RISC-V)**, Software Engineering (Javascript, HTML, and CSS), Intro to Comp. Systems **(UNIX/ POSIX)**, **Machine Learning** (Pandas, Numpy, LDA classification models, QDA models, KNN models, SciKit Learn)

## Awards

Member of Rutgers **Electrical and Computer Engineering Honor Society** / Eta Kappa Nu (HKN) and **Rutgers Institute of Electrical and Electronics Engineers** (RIEEE) since 2023.

**Rutgers Dean's List** in the School of Engineering throughout the years 2020-2023 for excellent and consistent academic performance.
Graduated with the High Honors (Magna Cum Laude) in Rutgers School of Engineering in May 2024.

# Projects

---

- **R-INSIGHT (Rutgers Real-time Interactive Neural Sensory Integration Glasses for Hearing Technology) - 6th Best Project | Project with the Best Impact | Rutgers ECE Capstone Design**
  - Developed affordable smart glasses with **real time** transcription, translation, and navigation on customizable glasses.
  - Built in **iOS/ Android app** integration using **Flutter** and **Dart** and connectivity with your phone for those with hearing loss.
  - Achieved 93% accuracy with **live translation** and **live transcription** using Flutter's Google Translate API, and Speech to Text API.
  - Integrated Text To Speech with **volume, speech rate,** and **pitch** controls for fully custom user preferences on the Flutter based mobile app.
  - Developed the backend using **Python's websocket servers** for taking in audio input, displaying the output on a Sony display, using a custom built PCB.
- **Dog vs. Cat Image Classifier - Support Vector Machine**
  - Loaded and processed over **2000 images** using Pandas and Numpy
  - Used Scikit Learn and Core Applied Machine Learning concepts to process, analyze images from a Kaggle dataset, perform **K-fold Cross Validation** training of the Support Vector Classifiers with various regularization values.
  - Achieved an accuracy of **62.38%**, correctly classifying over 2000 images of just Dogs and Cats in various light settings, angles, and backgrounds.
- **House Price Prediction Regression Models - Linear Regression, Ridge Regression**
  - **Loaded and processed tabular data** containing data of over 21000 houses in King County, USA, with 21 features, using Pandas and NumPy. Developed 3 new features using Applied Machine Learning and Feature Engineering skills gained in Machine Learning for Engineers at Rutgers.
  - **Trained** a **Linear Regression** and a **Ridge Regression** model after standardizing the features and performing K-fold cross-validation.
  - Evaluated the performance of the models using root mean squared error and R2 Scores.
  - Visualized the performance comparison between the models by graphing the predicted prices and the actual prices using **Matplotlib**.
  - Achieved an **R2 score of 0.7** (maximum 0.99) on both regression models, ensuring almost perfect predictions for all the house prices.
- **Codevengers Assemble- Hackathon by IEEE ( Institute Of Electrical And Electronics Engineering) Rutgers.**
  - Winning Project: Created a Virtual Discord Bot using **Python** and **Kivy** to assist the RIEEE Discord server's administrators in scheduling and sending cross-channel announcements | Greeting members when prompted | Sending inspirational quotes on triggering commands. | Setting multiple countdowns and timers.
- **HackHers 2022 at Rutgers by Women in Computer Science (WiCS).**
  - **AutoZoom**: Developed using **Python skills and Python-supported APIs**. Automatically open any scheduled Zoom meetings at the exact starting time.

# Certifications

---

- **Google Cloud Platform - Cloud Digital Leader,** Udemy *January 2024*
- **Agile Software Development,** LinkedIn *January 2024*