# AHMAD BASYOUNI

LinkedIn | 917-656-5597 | ahmadbasyouni2004@gmail.com | GitHub

## Education

**BS in Computer Engineering** — **City University of New York, CSI** — *NY, USA* — **08/2022 - 05/2026**

- The Verrazzano School: A 4-year selective Undergraduate **Honors** Program
- **GPA**: **4.0/4.0**
- Dean's Honors List (2022-2023) - Top 1% of Engineering Cohort
- Clubs: CSI Computer Science Club, CSI Institute of Electrical and Electronics Engineers Club

## Skills

- Python | C++, C | HTML | CSS | JavaScript | MySQL | React | Swift | Git | Flask | Autocad | Julia | Multisim
- Data Structures | Machine Learning & AI | OOP | Software Engineering | Web Development | Frontend | Backend | Full-Stack | Hardware Development and Systems Designing | Data Science | Cloud Computing | Circuit Analysis | 3D Modeling | Trouble Shooting | English, Arabic

## Experience

**Month Long Hackathon Sole Developer** — **Major League Hacking** — **11/2023-Current**

- Led the development of a Python Machine Learning Hospital/Pharmacy chatbot at an MLH hackathon, utilizing advanced libraries (TFLearn, NLTK, TensorFlow, Numpy, and Pandas) for natural language processing.
- Presented the project to a panel of judges, highlighting its innovative features and potential impact.
- Actively testing the chatbot within my network of friends, by gathering feedback and improving the model's accuracy, with plans for deployment to serve as an alternative for traditional appointments and contribute to an effective healthcare system.

**iOS Intern/Learner** — **CodePath** — **08/2023 - 12/2023**

- Utilized Swift Algorithms to optimize performance and contribute to open source projects, demonstrating problem solving skills, resulting in advanced iOS applications like a **Netflix Clone.**
- Integrated APIs to fetch and display real time data, by implementing decode/encode to convert data into JSON format for efficient storage and retrieval of movie information in UserDefaults
- Designed and developed high functioning applications with Swift's UI/UX StoryBoard, consisting of components like view controllers, autolayout, and tableviews.

**Computer Science/ Tutor** — **CUNY** — **08/2023 - Current**

- Responsible for elevating student's understanding of Programming Concepts, Algorithms, and problem-solving techniques in C++, resulting in a 40% increase in exam grades for those under my guidance within the initial three months of tutoring.
- Proficiently debugging students' code in C++ and providing best practice tips to ensure their projects exceeded the course's criteria.
- Guiding students through technical topics such as OOP, digital logic, circuit design, and theory of computation.

**FE Web Developer/Computer Engineer, Intern** — **Dyali Interiors** — **05/2023 - 08/2023**

- Utilized advanced foundation in web development (HTML/CSS) to create a front end website for the company to help launch special events and expand its online presence, resulting in a notable 20% increase in customer engagement.
- Troubleshooted software, hardware, and network issues for 30+ office computers and optimized the office's technology infrastructure by installing the WiFi network and assembling the majority of the PCS.
- Utilized AutoCAD to create detailed floor plans, elevations, and design drawings for prestigious apartment projects in the city
- Engineered construction methods by working with 3D printers (Software, Hardware) to enhance the company's architectural production.

## Independent Projects (GitHub)

**Full Stack Notes Web App - Python**

- Developed a full-stack web application that I personally use, which utilizes Python for backend handling and Flask for frontend.
- Implemented user authentication, allowing users to securely register, log in, and logout with the help of hashes.
- Created a database that stored the web app's data with the help of SQL and allowed for users to access, add, or delete notes.

**Pharmacy Chatbot - Python**

- Trained a neural network with connected layers to make predictions about the user's input using complex DSA and algorithms (tokenization, stemming, enumerations, and one hot encoding) to provide health guidance.
- Incorporated Python to create a prediction model with an accuracy of 97% and used Pandas, Matplotlib, and Numpy to manipulate data.

**Games Scripting/Automation - Python**

- Engineered a Python script leveraging OS, JSON, and Shutil modules to manage game directories. The script, driven by command-line arguments, copies, compiles Go code, and generates metadata in JSON format, offering an efficient solution for directory operations.