

Faddi Azzam Dabain

Ossining, New York | (914)689-6900 | fdabain01@manhattan.edu | [LinkedIn](#) | [Github](#)

Dear Hiring Manager,

I am writing to express my strong interest in the Software Engineer role. With my Bachelor of Science in Computer Science from Manhattan College and my diverse range of experiences, I believe I have the skills and qualifications necessary to excel in this position.

Over the years, I have gained valuable experience working as an IT Support Specialist at Manhattan College, where I collaborated with a team of professionals to swiftly resolve technical issues and provide support for hardware malfunctions. Through this role, I enhanced the user experience by conducting insightful troubleshooting and diagnosing hardware, software, and network-related problems. This experience has equipped me with a deep understanding of technical systems and the ability to quickly identify and resolve issues.

Additionally, I have also worked on various software development projects, such as developing a comprehensive web application at MCGardens. Using JavaScript, Firebase, OpenAI API, Unsplash API, and Nodemailer, I created a dynamic web application that facilitated user interaction with content on plants, weather, and events. By implementing user authentication and data encryption using Firebase and integrating API calls to OpenAI for plant care information and Unsplash for images, I built features that greatly enhanced user engagement. This project allowed me to gain experience in Agile Methodology while honing my skills in web development.

Furthermore, my involvement in leading the development of a dynamic Formula1 Leaderboard Database system using Python and SQL showcased my ability to design intuitive GUIs and robust databases for data visualization. By implementing historical data processing techniques, I was able to enhance the user experience by providing valuable race data analysis. These experiences have strengthened my problem-solving skills as well as my proficiency in Python programming.

Among all these experiences listed above, one particular project stands out - the Neural Network for Signal vs. Noise Detection. Through this project, I developed a two-layer neural network using Python with NumPy and Pandas to classify signal and noise in datasets. By optimizing the hidden layer and output layer through backpropagation and the sigmoid function, I achieved a high classification accuracy. Evaluating performance using MSE and ROC curve allowed me to refine the network further. This experience has provided me with a strong foundation in machine learning techniques and data analysis, which I believe will be highly valuable in solving complex problems as a Software Engineer.

Another significant experience that is relevant to this role is my involvement in Discord Bot Development. Creating a feature-rich Discord bot using Python, I integrated YouTube API for playing music and Spotify API for fetching and playing tracks within the server. By implementing commands for music control and queue management, I enhanced server interaction and entertainment. This project

allowed me to develop skills in API integration, further strengthening my expertise as a software engineer.

In conclusion, I am confident that my experiences in IT support, web development, database management, machine learning, and API integration make me an ideal candidate for the Software Engineer role. I am excited about the opportunity to discuss how my skills can bring value to your company. Thank you for considering my application.

Sincerely, Faddi Dabain