

6 September 2024

Dear Hiring Manager, University Recruiter, Siemens Healthineers,

I'm Jay, a CS grad student with a passion for developing software and integrating it with AI! As part of my master's program, I have been diving deep into Deep Learning and Computer Vision applications in the real world. My goal is to leverage my skills and experience to drive innovation and progress in the expansive realm of software development. I'm excited about the opportunity to collaborate with like-minded professionals on challenging projects that push the boundaries of what's possible in this ever-evolving field!

To make things easier for the recruiter, I'll answer how each qualification is relevant to my experience:

- **Educational Background:** I hold a Master's in Computer Science and a Bachelor's in Computer Engineering, both from UCSD.
- **Knowledge of LAMP Software to create Web applications:** I have created multiple web applications using LAMP! I am well versed with linux commands, hosting apache websites, managing relational mysql databases. I am familiar in Python and PHP.
- **Knowledge of JavaScript, HTML, CSS:** I have been using a combination of html, css and javascript since first year of my undergrad. I have successfully designed and deployed 100s of websites with integrated server architecture.
- **Experience using relational databases:** I am very familiar with relational DBs. During my internship at Makos Infotech, I had helped design their relational tables to improve existing performance. I worked with a combination of AWS RDS, Microsoft SQL Service, and PHP to integrate it in the front end.
- **Software versioning tools such as Git:** I am pretty familiar with Git! All my projects always start with a git repository for easy management, reverting, and collaboration! Most of my projects are public and is visible at <https://github.com/JayJhaveri1906>
- **Networking protocols and communication formats such as TCP/IP, Client/Server comms:** Apart from taking networking courses throughout my undergrad and masters, I have done various projects using them! The project that first comes into my mind is the one I did with Tata Institute of Fundamental Research. I was leading a team of 4, where in we developed a secure chat application for their internal use. We used a Python and Node JS based client server architecture, with TCP/IP as the communication protocol. We also in-situ implemented AES encryption, and enveloped the packets with HMAC encryption. We ended up publishing up a paper explaining our entire architecture: https://doi.org/10.1007/978-3-031-18497-0_41
- **HTTP(s), JSON, XML, SSH:** I have extensive experience handling communication over https. I am very familiar with xml and json data. Last summer, I was volunteering at a AI video editing startup where I developed a Python script which would capture all the edits a user would want on a video, store it in JSON, apply the changes to the video and store it on AWS S3 for easy versioning.

Thank you for the time and consideration. Looking forward to being a Healthineer!

Have a great day ahead,

Best,
Jay