

16 July 2024

Dear Hiring Manager, University Recruiter, Sales Force,

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

- **Minimum Requirements:** I hold a Master's degree in Computer Science from UCSD and a Bachelor's in Computer Engineering.
- **Special Skill Requirements:**
  1. **Python Development:**

Python has been my main programming language since my first year of undergrad. I am familiar with various ML libraries such as PyTorch, TensorFlow, and Weights & Biases for developing and deploying ML models. I have also used TFLite to deploy a lightweight image classification model for my Divya Drishti project. More recently, I am part of a team of five researching and working on a smart mirror with the ML model deployed on a Raspberry Pi.
  2. **Backend Development:**

I have extensive experience in backend development. During my internship at Makos Infotech, I handled server communication between the frontend and the database hosted on Amazon RDS service. I wrote scripts and logic for datasets to be queried on the fly from the frontend and used SQL to manage the dataset and optimize the relational structure for querying.
  3. **Java Development:**

I have substantial experience in developing Android apps using Android Java and Flutter. During my research assistantship at Tata Institute of Fundamental Research (TIFR), I developed an application targeted for use by radiation engineers, which automatically encrypted and uploaded instrument readings to a secure server efficiently. Additionally, I have taken numerous courses covering Java and Object Oriented programming principles during my undergrad.
  4. **IntelliJ, Bash:**

I am familiar with IntelliJ-powered IDEs and am well-versed in Bash.
  5. **Natural Language Processing and Understanding:**

I have extensive experience with NLP tasks, particularly my MEDLM project in collaboration with Microsoft Researcher Dr. Abacha, where my team and I fine-tuned LLMs for a specific task. My recent NLP venture was accepted as a poster presentation at the AMIA 2024 Annual Symposium.
  6. **Deep Learning and Artificial Intelligence:**

As a Machine Learning Intern at Legendary Entertainment, I analyzed logs and detected anomalies in user behavior. Projects like the H1N1 Vaccine Prediction model and MedLM highlight my practical skills in applying advanced algorithms to solve real-world problems. I recently served as a TA for a graduate-level Deep Learning course, further enhancing my grasp of machine learning fundamentals and analytical skills.
  7. **GCP and AWS:**

During my internship at Legendary, I extensively used Azure MS Graph APIs and Active Directory to write scripts and gather data for user behavior analysis. Previously, I used AWS, specifically S3, while working as a volunteer SDE at a university startup, helping optimize scripts for data transfer in JSON format. I am also familiar with Firebase and Google Cloud, and have specifically used GCP to train multiple deep learning models.

Thank you for the time and consideration. Looking forward to hearing back!

Have a great day ahead,

Best,

Jay