Dear Hiring Manager at Abiomed,

I am writing to express my interest in the co-op position of Software Development at Abiomed. As a current student at the University of California - San Diego, pursuing a Bachelor's in Cognitive Science with a focus on HCI and Computer Science, and preparing for a Master's degree in Computer Science, I am deeply invested in **harnessing technology to advance healthcare outcomes.** My educational and project background positions me as an ideal candidate to contribute to the development of UI components for your innovative class 2 medical device.

Throughout my academic and practical experiences, particularly at Carnegie Mellon University, I have cultivated a robust skill set in programming languages such as Java, **JavaScript, Python**, HTML5, and C, closely aligning with the technical requirements of the role. My technical projects, including the engineering of a **SQL Query Execution Engine and a Go-based Replicated State Machine Protocol**, have provided me with a firm grounding in the principles of developing user-centric, responsive UI designs and integrating complex logic with AI tools.

I have demonstrated success in collaborative environments, as seen through my work on a full-stack development project that involved collecting user feedback and iterating on design improvements. My approach to innovation is further evidenced by my role in architecting a decoupled web tool for the Al-Lego project, where I designed front-end components with **Vue CLI and Ant Design Vue**, integrated with a Spring Boot backend.

In addition to these experiences, I have a solid foundation in developing and supporting innovative teams, translating user needs into functional designs, and effectively communicating both written and verbally, as your role demands. **My familiarity with writing database queries, version control with Git, and cloud platforms through AWS extends** into my project work and coursework, demonstrating a hands-on approach to learning and applying new skills.

I am available to work full-time as per the co-op schedule and am open to forgoing compensation in favor of the rich industry experience that Abiomed offers. I am eager to bring my background in technical innovation, user experience design, and collaborative development to Abiomed, where I can help build the next generation of medical devices.

Enclosed is my resume for your review. I welcome the opportunity to discuss in greater detail how my skills and experiences align with the needs of your team. You can reach me at (858) 283-9471 or via email at shuyih1125@gmail.com.

Thank you for considering my application. I look forward to the possibility of contributing to Abiomed's mission to pioneer life-saving medical technology.

Warm regards,

Shuyi Han