FINAL PAPER

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I received a few internship offers before finally choosing to intern as a Software Engineering Intern with Intuitive Surgical Inc., whose headquarter is in Sunnyvale, California. I'm elated to have interned with one of the fast growing healthcare robotics companies in the United States, where I had the most amazing and edifying experience. Since this company is thriving and fast moving, I was prepared that it wasn't going to be an undemanding job with lots of research and insight needed to work, and the new people I was going to connect throughout my three months of internship. I started working in the Core Technology Engineering (CTE) team, on June 13, 2022. Sharing my experience and learnings along with the academic preparation SCU provided, I'd like to pen it down in this paper with the sense of Jesuits values that were practiced in my workplace.

Firstly, I'd like to express my gratitude to SCU's Computer Science and Engineering department for preparing me with the right skills and knowledge needed to adapt and work in my workplace. With the concepts in the courses I enrolled in, problem solving skills and the academic projects I completed over three quarters, it facilitated me in building my skillset and resume, which helped me bag this internship and work in the domain I hone in. Furthermore, it helped me perform well during my internship, in an environment new and achieve the tasks assigned to me.

The tasks and responsibilities I had include:

- Knowledge of the technology stack the application is coded with understanding of the complex issues.
- Designed the user experience (UX) of the components to be added in the application using Figma and Mural for rough sketching and final prototype.
- Programming work plans of collaborative medical robots for redesigned internal applications to fit end user requirements.
- Worked on customization and improvement of internal applications to increase the consistency overall and aid in the development of prototype.
- Coded on the latest version of JavaScript framework - ChakraUI which included components to support web interfaces.
- A pop-up module was devised to display the details of the targets in addition to the menu added to change according to user needs.
- Application code tested on test and real system to avoid complex user interface (UI).

- A lab system operated using NoMachine to verify the usability and evaluation of the application usage on large scale targets.
- Co-operated with my team members to compile the analysis with technical report for test case issues and knowledge transfer.
- Operated on JIRA and Confluence to keep a track of the progress done on the application.

The designing of the UI had got me to think and create an efficient interface from the user point of view and sketch it down roughly for feedback purposes. I learned the frameworks i.e ChakraUI, Vite and React Hooks to understand the code and implement my lines of logic to create the UI with functionalities. React was a regular part of my coding process where I devised components and modules and gathered feedback from my colleagues over regular stand-up meetings. I coordinated with them for the doubts and queries I had during the testing. I comprehended the work patterns with the debugging process my senior developers did and their ways of handling complex issues while maintaining the quality of the code.

I learnt to utilize softwares like Atlassian JIRA, Mural, Confluence for project management, sketching and documentation purposes. These softwares were used by me on a daily basis to monitor the assignments and bugs in the code. The most challenging thing I learnt was to use Git and BitBucket where major code review and initial deployment process happened. Other than that, the best part of my internship was the flexibility I had to work on-site and from home i.e hybrid setting, where I enjoyed my time at the office, getting to know the work environment and the freedom to work in a workspace set up by myself which gave me the space to think and create new ideas for the application at my comfort zone.

It was convincing to know how Intuitive aligned with the Jesuit values and practices. The employees are valued and welcomed at SCU and Intuitive for its culture and innovations and helps to enhance one's creativity to reality. Their motivation to be creative and inventive that shape to regulate the lives of the people in our community and across the world. The freedom to work from anywhere and work in your comfort zone, which is similar to SCU's way of liberty to bring out our prolific side and go within the principles of Jesuit values.

Intuitive serves towards improving the lives of people going through major health conditions by providing an efficient way to operate on them. Intuitive's partnership with American Cancer Society and Stanford Healthcare Group assures the work to be done through robots in an hassle free way. Whereas, programs like the Miller Center of Entrepreneurship and Frugal Innovation Hub supports and funds for services to be

provided in the underdeveloped nations. In a nutshell, the Jesuit priorities and values were observed in my workplace at Intuitive.

Lastly, I would like to showcase my appreciation to the SCU and Intuitive for giving me exposure to the work culture and the environment by aiding me with the right skills and career path and imbibing the values and practices required.