

UW ECE STUDENT SPOTLIGHT



Mandeep Singh
B.S. Electrical Engineering, 2020
Ranchi, Jharkhand, India

MANDEEP SINGH, B.S.



Mandeep's experience as a child in East India, assisting his dad with his home's control panel, with infrequent electric power, exposed him to this field and engendered his interest. He was inclined to electrical engineering, before arriving at the UW, but even more so after taking EE215. His concentrations in ECE are focused in Digital Signal Processing and Embedded Systems, writing software to program mechanical devices.

At the Sebasan Lab, his work was performing Vessel Perfusion, imaging the blood cells inside the retina, in a non-invasive method. Using an adaptive optical lens camera, he recorded video of the retina movement and manipulated the frames of the image as a matrix of pixels to identify color contrasts and locate blood vessels. He reflects on saying, "To look for issues within the eye, using this method, was a brilliant concept... seeing that sort of perspective." In Mandeep's experience with the RSO, Impact++, he worked with a non-profit organization called Grace Children's Foundation (GCF), to create a web app to profile children who need medical treatment, but cannot afford it. His team's innovation has saved GCF time and energy, previously profiling children by hand, the app also lists charities, hospitals, and doctors who are fit for a certain case. "For me, being just a university student, I still was able to have an impact on the lives of people across the world. Thus, embodying the UW's 'Be Boundless' tag-line."

For Summer 2019, Mandeep will be interning with Service Now in Kirkland, WA, assisting with IT Services and Management.