

## Internship Thoughts

As a beacon of photonic innovation, Lumentum has cultivated an exceptional work environment and a congenial culture that draws esteemed engineers and staff to the exciting field of optical communication. The flexible work hours and abundant snack options allows me to concentrate fully on my projects. The culture of open communication among global coworkers and effective management has boosted enhanced work performance. Recreational activities such as badminton, stair climbing, and weight loss challenge have not only promoted health but also fostered camaraderie among colleagues.

Equipped with a solid foundation in both hardware and software, I was able to lead and make significant contributions to the “VCSEL Wafer Testing Automation” project alongside the Product Team. With an aim to develop an agile, user-friendly, and integral software program, we engaged in collaborative discussions to devise ingenious solutions to potential challenges.

I utilized C++ and OpenCV to preprocess microscopic .bmp VCSEL images, thereby accelerating the data matrix (2D barcode) detection and decoding process using Python. This program also supports an easy update feature for the dynamic-link libraries of cipher decryption and provides a unique mechanism to manage and infer undetectable dies. With this portable software program, we can effortlessly generate a wafer mask without crack dies and validate the result with the generated logging data and visualization diaphragm.

Looking back, my tenure at Lumentum has been immensely beneficial, providing me with invaluable experience in real-world projects aimed at streamlining laborious manual operations. The positive feedback from my colleagues and customers has rounded off my internship with a sense of accomplishment. I would wholeheartedly recommend this influential company to all distinguished individuals seeking to make their mark in the industry.

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