



### VEC SUMMER INTERN: ADITYA RAMCHANDRA NAIK

UNIVERSITY OR SCHOOL: University of Liverpool

UNIVERSITY COURSE STUDYING: MSc Data Science and AI

#### WHAT MADE YOU WANT TO JOIN THE VIRTUAL ENGINEERING CENTRE FOR YOUR INTERNSHIP DURING THE SUMMER 2022?

The opportunity to gain valuable industrial experience as an intern working with a team involved with the development of real-world projects for SMEs.

## HOW DID YOU FIND OUT ABOUT THE INTERNSHIP?

I was emailed about the opportunity by the student experience team at the University of Liverpool.

#### DID YOU HAVE ANY PRECONCEPTIONS ABOUT THE VIRTUAL ENGINEERING CENTRE AND WHAT THE CENTRE DOES PRIOR TO STARTING YOUR INTERNSHIP?

No, not really, however I did my own research and knew what the VEC was from the information available on the VEC website and videos on YouTube.

#### WHAT WERE YOU DOING DURING YOUR INTERNSHIP AT THE VIRTUAL ENGINEERING CENTRE?

I worked on a project involving the use of machine vision for classifying objects based on size, colour and QR/barcodes. This machine vision system would then be applied to control a pick and place robotic arm which could have possible industrial applications in the manufacturing, packaging or even the warehouse industry.

# WHAT SKILLS DID YOU NEED TO UTILISE TO COMPLETE THE TASKS SET?

The main skills required for completing the project would have to be programming using Python, OpenCV and Pycharm

#### DID YOU LEARN ANYTHING NEW AND SOMETHING BEYOND YOUR COURSE?

Yes, I did learn a lot about image processing using OpenCV and Robot programming with Python which wasn't part of our curriculum at the University.

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WAS YOUR TIME AT THE VIRTUAL ENGINEERING CENTRE WHAT YOU EXPECTED AND DID IT MEET YOUR EXPECTATIONS?

Yes, it was, and it met my expectations in every way.

## DID YOU DEVELOP OR LEARN ANY NEW SKILLS DURING YOUR SUMMER INTERNSHIP?

I learned how to use OpenCV for image processing and machine vision which will greatly help me in developing my abilities in the field of computer vision.

I feel like I can now combine the advantages of OpenCV with Machine learning based Computer vision models which will greatly help me in advancing my career.

DO YOU FEEL YOU RECEIVED ADEQUATE TRAINING AND SUPPORT DURING YOUR TIME AT THE VIRTUAL ENGINEERING CENTRE?

Yes, I believe I have. My mentor Thomas Kendall (VEC's IoT Specialist) has been very helpful and has provided his support at every step of the project development process.

DO YOU HAVE ANY RECOMMENDATIONS OR WORDS OF ADVICE FOR OTHER STUDENTS WHO ARE CONSIDERING AN INTERNSHIP (NOT LIMITED TO THE VIRTUAL ENGINEERING CENTRE?)

Internships are the best way to apply the knowledge gained through university coursework to the industry.

My advice would be to completely brush up on the skills gained through University and try to complement those abilities by doing a bit of extra reading and learning through MOOCs and other learning resources available online which will help the student get the most out of their internship.

WHAT ARE THE NEXT CAREER STEPS YOU WISH TO TAKE FOLLOWING YOUR COURSE COMPLETION?

Being fresh out of University I would be applying for entry-level Machine learning engineer roles or entry-level Data scientist roles in the software industry.





