

## SHIV BHATIA

London, UK  
shiv.bhatia20@imperial.ac.uk

github.com/galenys  
linkedin.com/in/shiv-bhatia/  
bit.ly/shivbhatia

## EDUCATION

Imperial College London [2020-2024]  
Mathematics and Computer Science MEng  
The Shri Ram School, Moulsari, Delhi [2016-20]  
IB (44/45), class rank 1

## EXPERIENCE

Palantir (Software Engineering Internship) [June 2023 - Present]  
I created a feature that allows users to visualise automated processes in their organisation.  
Microsoft (Software Engineering Internship) [June 2022 - September 2022]  
For my main project, I added video conferencing to MaXUC, a unified communications platform.  
OfficeHours (Co-Founder and CTO) [March 2020 - August 2020]  
We built a platform for university educators to hold virtual office hours during Covid-19.  
We raised \$100k from Open Water Accelerator before shutting down operations.  
NTT Data (Research Internship) [Jan - Jul 2019]  
I worked on a new technique in generative adversarial networks and created an analysis of the performance of different variants of reinforcement learning for simulated control problems.

## PROJECTS

Imperial Planetary Robotics Lab - European Rover Challenge [March 2023 - Present]  
I created the computer vision system for a Mars rover prototype, using a 360 degree camera to continuously detect ArUco codes in the environment for simultaneous localisation and mapping.  
RCoin [October 2022 - December 2022]  
Our team created a real-time auditable stablecoin and mobile payment platform to replace the expensive existing payment solutions in Eswatini.  
Unlike existing stablecoins, RCoin offers an API for directly auditing our store of fiat currency which is updated live. On-chain transactions are very inexpensive compared to existing bank transfer fees. Our infrastructure was designed to detect fraud and handle irregular network loads.  
We met with the finance minister of Eswatini who gave us valuable feedback on how to improve our mobile app, and the project is currently being commercialised and deployed.  
WACC Compiler [Jan - Mar 2022]  
Our group wrote a compiler for the WACC language specification in Scala.  
PintOS [Sep - Dec 2021]  
Our group added features to the PintOS operating system, including threads and user programs.  
ARM11 Assembler and Emulator [May - Jun 2021]  
Our group wrote a simulation of a CPU that supported a subset of the ARM11 instruction set.  
MetaWord2Vec [Nov 2020]  
I created a minimal language embedding model in Pytorch. The model successfully learned semantic relationships between words in the embedding space while being 90% smaller than existing SOTA embedding models at the time.  
OpenAI GYM Rubik's Cube [March 2020]  
I created an open source Rubik's cube implementation which was added to OpenAI's Gym library, a collection of environments designed for deep reinforcement learning research.

## AWARDS

Polaris Fellowship 2023  
A 9 month program organised by Entrepreneur First designed to create a peer group of talented, ambitious individuals and help them realise their projects.  
Ocado Technology Group Project Prize 2023  
Awarded to the best 3<sup>rd</sup> year group project.  
G-Research Prize (Year 2)  
Awarded to the top ten computer science students across all undergraduate years.  
Dean's List (Year 2, Year 3)  
Awarded to the top 10% of students in the year.

## SKILLS

[Languages]: Python, Typescript, Rust, Java, Haskell  
[Frameworks]: Pytorch, React.js, Django, GraphQL