| Hrishikesh Venkatesh  Current third year student at Imperial College London | **+44 (0)7913 626854**  **hv122@ic.ac.uk** |
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| EDUCATIONMEng Electronic and Information Engineering OCTOBER 2022 - PRESENT: South Kensington, UK  On track to average a first following my first two years. Relevant modules include Instruction Architectures and Compilers, Discrete Maths and Software Systems. Courseworks in second year include the **design of a RISC-V processor in SystemVerilog and a C90 compiler.** Learnt key skills such as designing testbenches with Verilator for SystemVerilog in C++ and creating documentation for my software designs in both Markdown and LaTex. Taken part in societies like Data Science, Football and Algorithmic Trading. A-Levels at Heckmondwike Grammar School SEPTEMBER 2020 - JUNE 2022: Birstall, UK  A\*A\*AA in Maths, Further Maths, Physics and Chemistry respectively, demonstrating a strong foundation in mathematics. PRIOR EXPERIENCE **HSBC DBS Summer Intern**  JUNE 2024 - AUGUST 2024: Sheffield, UK  Worked in the Engineering Stream at the HSBC Office in Sheffield, developing various Digital Business Solutions as part of a wider software engineering team. RELEVANT PROJECTS **C90 Compiler**  Developed a C90 Compiler as part of a pair, in which we combined to pass 100% of seen cases, and score **82%** in the coursework altogether, one of the best performances in the cohort. I personally developed the float, double and char handling as well as implementing the behaviour of the typedef keyword.  **RV32IM Coursework**  Worked as the ‘verification engineer’ developing testbenches in C++ for SV modules, as well as creating Python scripts to auto-run the Verilator models. I also went further to learn YAML and implement a GitHub Action to involve some CI/CD workflows as are used in industry. **This coursework scored the highest in the cohort.**  **Athora Balancing Robot**  Developed a webpage as a Flask app, incorporating Gamepad API and YouTube API for manual control and output of computer vision. Experimenting with hosting the Flask app on both Azure and AWS services, utilising POST and GET requests alongside both SQL and no-SQL databases.  **Neural Network built in PyTorch**  Developed a neural network to classify the FashionMNIST dataset, introducing Computer Vision to my skill set as a ML Engineer. Currently learning more about CNNs and how AI/ML is used in industry.  **IC AlgoThon ‘23**  Developed an algorithm to provide a portfolio with low risk using backward deviation and the Sortino Ratio to do so. Completed as part of the IC Algothon, with the challenge provided by BlackRock.  **IBM Z Datathon**  Gained valuable experience and understanding of how it is to work in a time-pressured, team environment, developing a machine learning model to assist sports scouts narrow down potential talents using statistics to determine their predicted trajectories. In addition to this, I learnt more about the way software development is conducted in industry, using IBM Cloud VMs, Docker and Jupyter Notebooks with collaboration.  **Front-end Development for E-Commerce Website**  Designed, developed and tested the front-end of a website alongside a friend who developed the back-end and databases involved. During this I learnt the key aspects of the React framework, JavaScript and HTML fundamentals. Developed a shop and cart functionality. | [GitHub](https://github.com/hv122)  [LinkedIn](https://www.linkedin.com/in/hrishikesh-venkatesh-216645243/)  [Website](https://hv122.github.io) SKILLS  * C++, SystemVerilog, Rust, SQL, Python, PyTorch, TensorFlow, Markdown, HTML, CSS, JS, React, Docker, Jupyter, NumPy, Pandas, YAML, AWS, Azure  LANGUAGES English - Fluent, Tamil - Native, French - Beginner |
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