|  |  |
| --- | --- |
| MATILDE PICCOLI  Visit my **portfolio** at: [matilde\_piccoli\_portfolio](https://mp2419.github.io/matilde_piccoli_portfolio/index.html)  CONTACT  +44 7747 651727  [matilde.piccoli@gmail.com](mailto:matilde.piccoli@gmail.com)  [matilde.piccoli](https://www.linkedin.com/in/matilde-piccoli) | Master student in Electronic and Electrical Engineering with expertise in Circuit Design, Robotics, and ML, looking for research opportunities.  Interest in Biomedical and NeuroEngineering applications. |
|  |
| AREAS OF EXPERIENCE  System Engineering • Robotics • Machine Learning  Digital Verification • Analogue Circuits Design • Biomedical Electronics  Embedded Systems • Object-oriented Programming • Team-working  SKILLS  System Verilog, Python, C++, Matlab, Linux, GitHub, CAD, HTML and CSS |
|  |  |
| IMPERIAL COLLEGE LONDON (UK)  2019 - Present | EDUCATION **MEng in Electronic and Electrical Engineering**   * On track for **First Class Honors**, awarded Best Project of the Second Year. * Main modules:   + **Biomedical** **Electronics**, Analogue Integrated Systems.   + **Robotic Manipulation** (Matlab, CAD), Embedded Systems (Python, C++).   + **Machine Learning & Deep Learning** (Python), Artificial Intelligence (Algorithms, Prolog).   + **Circuit & Systems Design** (Digital and Analogue Systems, FPGAs, PCB, Verilog).   + **Control Engineering** (analysis and design of linear control systems, MATLAB).   + Digital Electronics and Computer Architecture (CPU design). * Member of the MedTech and Robotics Societies; student at the Imperial College Business School. |
|  |  |  |  |
| APPLE (UK)  March 2021 – Present  ARM (UK)  Mar 2021 - January 2022  IMPERIAL COLLEGE LONDON (UK)  Jan - Apr 2022  IMPERIAL COLLEGE LONDON (UK)  Jan - Apr 2022  IMPERIAL COLLEGE LONDON (UK)  Jan - Apr 2022  HOUSTON METHODIST MEDICAL CENTRE (US)  June 2018 | EXPERIENCE **GPU Design Verification Engineering – Placement**   * Junior Design Verification Engineer role in the GPU team at Apple, responsible for the Verification of a unit withing the Apple GPU in an extremely time-sensitive environment. * Extensive experience in Digital Design and Verification using Object-Oriented Programming (System Verilog and UVM Library); Developed analytical and team-working skills.   **Hardware Design Engineer - Undergraduate Role**   * Junior System Engineer in the CPU team at Arm, world leading technology provider of processor IP. * Successfully designed and verified an interface unit for the communication between processors, with memory system; developed technical specifications for consumer hardware projects; Received highly positive reviews from manager and colleagues for my quick progress in the project and my commitment to learning.   **Robotic Arm – Project**   * Developed the kinematic model and motion controller (Matlab) for a Robotic Arm, to implement different tasks (moving and reorienting blocks, drawing, making sushi); designed (CAD) and 3D-printed multipurpose grippers and other task-specific tools; worked in a extremely time-pressured * Achieved upper 1st class and highly positive feedback following the live demonstration**.**   **Aquapolis IoT System – Start-up Prototype**   * Ideated and developed an IoT system able to identify the water quality, mapping and giving information of the sources and safety of water in the area; the 3d-printed portable device uses multiple sensors, raspberry pi, encrypted communication, a ML model for the data analysis, and a user-friendly web-app (Flutter) to track the measurements and view the local sources of water. * Achieved upper 1st class and highly positive feedback during the marketing presentation**.**   **Autonomous Mars Rover - Project**   * Collaborated in an interdisciplinary project to implement an autonomous Rover detecting and mapping objects; Leading role in the implementation and testing process of the Drive System, comprehensive of movement and error correction algorithms and PID controller coded in C++ (Arduino, SMPS, motors based on the data collected by optical sensor and camera). * Achieved upper 1st class individual mark and the award for Best Project of the Year   **Biomedical Research- Work Shadowing**   * Selected for a competitive stage at one of the biggest centres for medical research in the world. * Assisted at the development of innovative technology for the cure of cancer (remote-controlled drug delivery implants) and diagnostics’ technologies; Developed research-oriented approach. |