

Max Pianta

maxpianta@icloud.com | LinkedIn: [Max Pianta](#) | Portfolio: [maxpianta.me](#) | (617) 412-5842 | Boston, MA

Education

Master of Science in Mechanical Engineering

Expected Jun 2027

Boston University, Boston, MA, United States of America

- **GPA: 4.00 / 4.0**
- Design, simulation and controls: FEA, CFD, robotics, data science, engineering mathematics, manufacturing and prototyping
- Engineering Deans and Athletic Scholarship covering 90% of all associated cost

Bachelor of Engineering in Mechanical Engineering (First Class Honours)

Sep 2022 - Jun 2025

Oxford Brookes University, Oxford, United Kingdom

- **GPA: 3.92 / 4.0**

Engineering Projects

BEng Dissertation | Rowing Telemetry for Elite Athletes

Siemens NX CAD | Excel Load Modelling | ANSYS FEA | MATLAB | 3D Prototyping

- Engineered and validated a low-cost, IP67-rated electro-mechanical sensor housing via 3D-printed prototyping and O-rings, built to withstand wet, impact, and vibration conditions of on-water elite rowing training
- Built an iterative FEA verification workflow (106,867-element mesh) combined with an Excel-based load model, then coded a custom MATLAB script converting strain/angle data into stroke-performance metrics streamed live to a phone via Bluetooth
- Won 3rd Prize at the Oxford Brookes Enterprise Tech Show, out of 500 STEM projects, and was nominated for the National STEM Inspiration Award by the Principal Lecturer for innovation, impact, and engineering rigour

Oxford Brookes Racing Formula Student | Suspension Design & Analysis

SolidWorks | MATLAB | Kinematic Modelling | Load Analysis | Data Validation

- Developed suspension kinematics and load models in MATLAB and CAD to predict camber/toe change, KPI and wheel loads
- Validated the models against measured car data, feeding results into wishbone and upright sizing

Industry Experience

Graduate Mechanical Engineer | Ridge & Partners LLP

Oct 2025 - Aug 2026

- Executed rapid-iteration design cycles across 4 concurrent F1, Defence, and Heritage programmes under strict NDA controls and compressed schedules, sustaining a combined project value of £80M
- Designed data-centre cooling and HVAC systems as part of a full MEP fit-out generating £8M/year in operational savings, alongside building services for a 1,400-person office and F1 team facilities
- Led mechanical engineering on a £6M heritage project for a 600-year-old Grade I listed building, working directly with architects and structural and civil engineers to integrate building services within strict conservation constraints
- Facilitated mock interviews and engineering pathway talks as a Go Construct STEM Ambassador, engaging 70 students across 5 schools, and trained 18 colleagues on AI-assisted workflows as a recognized Copilot Champion

Software Proficiency & Outputs

CAD:	SolidWorks, Onshape, Siemens NX, AutoCAD	3D parts/assemblies, GD&T, BOM, DFM & CAM/toolpath generation
FEA:	ANSYS, Siemens NX Simulation (Nastran)	Static, modal & fatigue analysis for structural/thermal loading
CFD:	STAR-CCM+, SolidWorks, ANSYS	Airflow/thermal simulation for cooling system design
Coding:	MATLAB, Python, Arduino	Data analysis, control-system modelling & embedded prototyping

Leadership & Notable Achievements

Rowing

2018 - Present

NCAA Division 1 | National Team World Championship Finalist | British University Champion | Captain of Boats

- 30 hours/week at a UK high-performance centre while studying 40 hours/week and achieving a First-Class Honours engineering degree, balancing elite athletic and academic performance under competing demands
- Competed and medalled internationally at races including Henley Royal Regatta and 99th percentile on national rowing tests

Head Prefect & Head of Student Council

2019 - 2022

Established Mentorship Programme | Speeches In Front of 1100 People

- Chaired an 8-person student-and-teacher committee delivering school-wide sustainability and welfare initiatives, increasing onsite recycling 2x (from 4.3 to 8.83 tons/year) and expanding support services to 82 students
- Founded a mentorship programme pairing seniors with incoming students, supporting 30 mentees with a 76% retention rate