

Max Pianta

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Education

Master of Science in Mechanical Engineering (Aerospace & Simulation)

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
- **90% Academic/Athletic** scholarship awarded for academic merit and **NCAA Division 1 Rowing**

Bachelor of Engineering (First Class Honours)

Sep 2022 - Jun 2025

Oxford Brookes University, Oxford, United Kingdom

- **GPA: 3.92 / 4.0**
- **Automotive, structures and manufacturing:** CAD/CAM, stress analysis, dynamics & NVH, materials, controls

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, cleanroom environments, for a **1,400-person** office within a **600-year-old Grade 1 listed** building
- **Facilitated** mock interviews, job-prep workshops, and engineering pathway talks as a Go Construct STEM Ambassador in partnership with Construction Excellence, engaging **70 students across 5 schools** in early exposure to engineering careers
- **Trained 18 colleagues** on AI-assisted workflows across **3** internal sessions 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