

NASSI MANDALAS

CREATIVE ENGINEER

Engineering Product Design graduate with hands-on experience in CAD modelling, technical drawings, prototyping and manufacture. Developed mechanical components and assembly jigs, supported drawing reviews and led quality assurance on construction projects. Practical knowledge of CNC machining, composite fabrication and site team coordination.

EDUCATION

BSC ENGINEERING PRODUCT DESIGN

London South Bank
2021 - 2024

BENG ENGINEERING

Open University
2020 - 2021

HOLY TRINITY SECONDARY SCHOOL

COE High School
2010 - 2015
6 GCSE

WORK EXPERIENCE

GRADUATE ENGINEER

Ground Stabilisation Systems - April 2025 to July 2026

- *Led quality assurance across concurrent construction projects, reviewing drawings and specifications and flagging non-conformances early.*
- *Supported project delivery, budget management and cost tracking alongside site quality requirements.*
- *Supervised site teams of 5-15 workers on projects typically lasting 2-3 months.*

MECHANICAL ENGINEER INTERN

Hanwha Phasor - Apr 2023 - Sep 2023

- *Designed and built jigs for electrical assembly*
- *Reviewed engineering drawings and specifications to support accurate assembly.*
- *Performed data analysis in Python to support systems engineering*

MECHANICAL & COMPOSITES ENGINEER

AIM93 - Sep 2022 - July 2024

- *Designed, prototyped, and manufactured components for streamliner bikes*

ELECTRICAL TECHNICIAN / SUPERVISOR

ICM Alarms Ltd - May 2017 - Aug 2021



ACHIEVEMENTS

IMECHE DESIGN CHALLENGE

Selected to represent LSBU in a regional competition with a two week deadline to design and build a functioning prototype. Competed against other universities and delivered a working solution within the timeframe.

NEW DESIGNERS 2024

My final year project, Kinesis, was selected to Represent London South Bank University at the New Designers national showcase in London, one of the UK's largest design exhibitions.

WORLD HUMAN POWERED SPEED CHALLENGE

Competed in the World Human Powered Speed Challenge in Battle Mountain, Nevada as part of the AIM93 team. Working as an engineer on the design and build of the streamliner bike, the team achieved a top speed of 65mph.

INTERESTS

COMPOSITES

Hands-on experience designing, prototyping and manufacturing carbon fibre components with AIM93, including mould making, layup, vacuum bagging and resin infusion.

MACHINING

Practical workshop experience using CNC mills, routers, lathes and laser cutters. Interested in how materials, processes and assembly requirements inform buildable designs.

COMPUTER AIDED DESIGN

Use Fusion 360 and Onshape to develop mechanical designs and support prototyping. Enjoy translating concepts into physical components, with attention to fit, function and clear technical drawings.

TECHNICAL COMPETENCIES

MACHINES & WORKSHOP

CNC milling, CNC routing, lathe operation, laser cutting, hand tools, measuring and inspection equipment

FABRICATION & MANUFACTURING

Composites layup/vacuum bagging/resin infusion, mould making, prototyping

CAD & DESIGN SOFTWARE

Fusion 360, Onshape, 3D modelling, technical drawings, ANSYS (FEA), Adobe Creative Suite

PROJECT MANAGEMENT

Microsoft Project, quality assurance, budget tracking, subcontractor coordination, technical drawings

ADDITIONAL INFO

I decided to pursue a degree in Engineering at 23, after enjoying work as an electrician but wanting to do something more creative.

I went down the route of the Open University, after which I transferred to LSBU after a year, deciding that I wanted a more hands-on experience. I've really enjoyed the making and designing aspect of the course, especially being in the workshops.

I was chosen to represent LSBU at the IMechE design challenge, which I really enjoyed. I am also a member of AIM93 group which aims to beat the human-powered land speed record of 93mph and was also chosen to represent LSBU extracurricular project at the world human powered speed challenge 2022 in Nevada, US.

