Yashvini Shukla

+44 7831 187658 | yashvini.shukla.17@ucl.ac.uk | linkedin.com/in/yashvini | www.yashvini.com | v. December 2020

About

Solastalgia drives a lot of my passion in perusing research to use Maths, and AI in answering critical climate change questions.

kills & Languages

HEC HMS	**ArcGIS**
GSA, Etabs	AutoCAD
HTML/CSS	MATLAB
Aimsun	Python

Advanced, Intermediate, *Beginner*

Awards/Honours

Dean's List: 3.78 GPA (2020)

RPI Fall Semester 2019

Reference: *Dr. Daniel C. Lander*

landed2@rpi.edu

First Prize winner of UCLE Hackathon 2020;

Fast tracked to an internship with Kano Computing to make computing more accessible to children.

Mayor's Entrepreneur Competition Finalist

Designed a Reusable Cup Vending machine system (CupMonkey) which was chosen as 1 of the 10 finalists out of over 400 entries.

UCL Business Game

Won 3rd place in and startup entrepreneurship challenge.

IGCSE – 7 A*, 2 A s

IBDP – 38 points

Hobbies & Projects

- Cycling, music mixing and playing,
- Managing 2 sustainability themed social media pages with 800 likes+
- Freelib – A book exchange website
- Campaigns Officer with UCL Vegan and Vegetarian Society on a plan to make UCL have plant-based foods
- Engineer in RPI Geowall Team to create a retaining wall with minimum material use.
- Involved Open Cages UK, Humane League, UCL Global Health Society.
- Python Fundamentals course

Education

University College London Sep 17 – June 21

MEng Civil and Environmental Engineering with Year Abroad (Rensselaer Polytechnic Institute, NY, USA), Specialist modules in Connected Systems, Numerical Analysis & Programming for Engineers, Spatio-Temporal Analytics & Big Data Mining, Hydrology and Hydraulics, Dynamics of Soils and Foundations, Geo-environmental Engineering.

Research Experience

Fluids Undergraduate Researcher| Rensselaer Polytechnic Sep 19 –Aug 20

Languages/Frameworks: MATLAB with PIVMAT (Particle Image Velocimetry) addon

- o Studying wake formation and shear layer in building under Dr. Daniel C. Lander, a leading researcher in shear layer thickness studies around bluff bodies.

Sustainability Researcher | Integrated Design Project Sep 20 – Dec 20

LEED, BREEAM specification criteria research

- o Building a hospital in Hounslow, London with the latest sustainability credentials
- o Designing a Net Zero Carbon plan for a Translational Biomedical Centre.

Seismic Structures designer| MEng Civil Engineering Sep 20 – Dec 20

Languages/Frameworks: ETABS Structural analysis software

- o Building an office space in Norcia, Italy which is seismically safe and active
- o Using Eurocode 8 to optimize design for a column and build seismically safe structure and producing a report on it.

Renewable Energy Market Research|EcoNomad Solutions Jan 18 – Nov 20

- o UCL Startup by Dr. Ian Adler where I learnt about ongoing research in making EcoNomad's solar pumps and biogas digesters in UCL's Pamela facility, preparing pitching idea for RAEng, London.

Geochronology Lab volunteer |UCL Geography Dept. Sept – 20 (ongoing)

- o Learning how to use Python in licenced Zeiss SEM microscope in dating East African rock samples, creating templates to automate tasks of analysing slides.

Industry Experience

Summer Internship | Beale Halai   Sep 20

- o Surveying and EDM instrument checks on a 3 storey commercial/residential unit.
- o Monitoring cracks and making on-site reports.
- o Quality checking steel and concrete works done by the contractors on site.

Teaching Assistant and Member | People Power Jan 18 – Sep 19

- o Conducted 2 workshops about solar panels and wind power in 2 schools around London. Worked with different engineers to produce a working lesson plan to teach design, development and other technical skills to children.

Engineering Designer | Engineers Without Borders, USA Sep 19 – Present

- o Designing a plastic water tank with a concrete foundation for a trip in Nicaragua to take place in March 2020 , corresponded with the lead project Engineer for quality checks.

Transition Mentor |University College London Sep 18 – Dec 18

- o Mentorship to first-year CEGE students, giving career advice related to navigating their academics and university life

UCLH Green Impact Assistant | University College London Jan 18 – Sep 18

- o Helped the UCL CEGE lab decrease its carbon footprint by working with the lab assistant to adopt best practices for labs, designed and published the hospital's first newsletter.

Work experience | Costain-Skanska Joint Venture (CSJV) 3 - 7 Jun 19

- o Working with the noise insulation team to fix panels near King's Cross Station, Using Data analytical skills in excel to log complaints and keep track of clients.

Engineer - UCL Mars Rover and Lunar Rover Team Oct 18 – Mar 19

- o Finding optimal fuel for our rocket design in combustion chamber team.