Vedang Joshi

CONTACT Information



Mobile:

⊠ E-mail: vedang0401@gmail.com

Homepage: https://vedang-joshi.github.io/
in LinkedIn: www.linkedin.com/in/vedangjoshi/

EDUCATION

King's College London, London, UK

Oct 2023 - Present

 Doctor of Philosophy - PhD, Computational Engineering

Advisor: Dr. Julia Li

University of Bristol, Bristol, UK

Sept 2018 - Jul 2022

Master of Engineering - MEng (Hons), Engineering Mathematics

Dissertation: A lateral line sensor based mechanistic algorithm for emergent fish schooling behaviours in multi-agent swarms, supervised by Prof. Sabine Hauert and Dr. Elliott Scott Activities and Societies: Bristol Engineering Mathematics Society, Bristol Swimming Society, Bristol Ice Skating Society

Industry Experience

The Boeing Company

Rotational Graduate Scheme

Sept 2022 - Present

Two-year graduate rotational scheme with 4×6 month rotations around the UK.

- Strategic Experimentation & Analysis, Fleet, UK [Sept 2023 Present]
- Research, Development & Engineering Strategy, Bristol, UK [March 2023 Aug 2023]
- TLCS-2 Project Engineering, Gosport, UK [Sept 2022 Feb 2023]

RESEARCH EXPERIENCE

University of Cambridge, Cambridge, UK

Jun 2021 - Sept 2021

Research Assistant, Epidemiology and Modelling Group

- Advisors: Dr. Renata Retkute, Dr. Cerian Webb and Prof. Chris Gilligan
- Spatially-explicit stochastic dynamic epidemiological simulations on Citrus Huanglongbing.
- Modelling the spread of tree pests through road networks using stochastic simulations. Acknowledged in Modelling the spread of tree pests and pathogens in urban forests.

Imperial College London, London, UK

Jun 2020 - Oct 2020

Research Assistant. Biomathematics Group

- Advisors: Dr. Florian Klimm and Prof. Nick Jones
- Node-centralities in mitochondrial protein interaction networks for predicting gene essentiality.

TEACHING EXPERIENCE

University of Bristol, Bristol, UK

Demonstrator (Teaching Assistant)

Jan 2022 - May 2022

EMAT10006 Further Computer Programming: Module designed for students to be fluent in the fundamentals of programming in Python. Taught basic software engineering and collaborative skills, so students are able to develop computer code efficiently in groups.

Demonstrator (Teaching Assistant)

Sept 2021 - May 2022

EMAT22220 Mathematical and Data Modelling 2: Coursework based module designed to help students to improve their ability to apply mathematical modelling and data analysis skills to the solution of problems of academia, industry and business.

Demonstrator (Teaching Assistant)

Sept 2020 - May 2021

EMAT10704 Discrete Mathematics 1: Teaching included number systems and arithmetic, logic and proof, sets, relations and functions. Includes graph theory, and the link between continuous and discrete mathematics. Mode of teaching split between online and face-to-face learning.

ACHIEVEMENTS

The Boeing Company Cash Prize - \$1000

2023

The Boeing Company

Delivering the responsibilities of a Project Engineering level 4 Technical Lead Engineer during the first 6 months of the graduate scheme.

Academic Achievement Award

2018

Royal Wootton Bassett Academy

One of 18 recipients: For outstanding achievement in A-Level results

Award for Services to the School & Community

2018

Royal Wootton Bassett Academy

Bronze, Silver Medal

2015, 2016

UK Mathematics Challenge

TECHNICAL SKILLS

- Programming Languages: Python, MATLAB
- Operating Systems: MS Windows, MacOS/iOS, Unix/Linux
- ML/Statistical learning frameworks [Python]: Classification (Latent Dirichlet Allocation), Regression (Extra-trees, Sequential Forward Selection), Time series, Clustering (KNN), Feature engineering (Dynamic time warping), Natural Language Processing (NLP), Markov chains
- High Performance Computing (HPC): SLURM, Moab/Torque proficient
- Software: Maple, RStudio, Wolfram Mathematica, Jupyter Notebook/Google Colab, QGIS (Open Source Geographic Information System), GitHub, MS Office
- Typography: LATEX

Affiliations

MEMBERSHIPS AND Associate Member, The Institute of Engineering and Technology, UK

April 2023 - Present

Associate Member, The Institute of Mathematics and its Applications, UK Dec 2019 - Present

LANGUAGES English Native proficiency

Marathi

Native proficiency

Hindi

Fluent

French

Professional working proficiency

References

Available upon request