Vedang Joshi

CONTACT Information 65 Alma Road, Clifton

□ E-mail: vedang.joshi.2018@bristol.ac.uk

Bristol, United Kingdom
□ Homepage: www.vedang-joshi.github.io

BS8 2DW in LinkedIn: www.linkedin.com/in/vedangjoshi/

EDUCATION

University of Bristol, Bristol, UK

Jul 2018 - Present

Master of Engineering (MEng), Engineering Mathematics

Activities and Societies: Bristol Engineering Mathematics Society, Bristol Swimming Society, Bristol Ice Skating Society

Royal Wootton Bassett Academy Sixth Form, Swindon, UK

Jun 2016 - Jun 2018

A-Levels: Mathematics, Further Mathematics, French, Physics, EPQ Activities and Societies: Senior Prefect, Sixth Form Leadership Team

RESEARCH EXPERIENCE

University of Cambridge, Cambridge, UK

Research Assistant, Epidemiology and Modelling Group

Jun 2021 - Sept 2021

- 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.

Imperial College London, London, UK

Research Assistant, Biomathematics Group

Jun 2020 - Oct 2020

- 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)

Sept 2021 - Present

EMAT10006 Further Computer Programming, EMAT10100 Engineering Mathematics 1, EMAT22220 Mathematical and Data Modelling 2: Teaching includes basic software engineering and collaborative coding skills. We cover vectors, complex numbers, matrices as transformations, eigenvalues and eigenvectors, sequences, series, functions, curve sketching, fourier series, numerical analysis, differentiation and integration of functions of one variable, Taylor series, numerical root finding, introduction to partial differentiation, differential equations and probability. Mode of teaching split between online and face-to-face learning.

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.

Mathematics in Education and Industry, Swindon, UK

Teaching Assistant/Mentor

Jun 2020 - Sept 2020

Advanced Mathematics Support Programme: Tutoring Year 12 maths students preparing for STEP and MAT. Helping with online tutorials, marking papers and worksheets and giving written feedback on group mathematical modelling tasks.

Shaw Ridge Primary School, Swindon, UK

Teaching Assistant

Oct 2016 - Nov 2016

Teaching assistant for a Year 3 teacher to teach numeracy and literacy; assisted with class activity preparations.

STEM OUTREACH University of Bristol, Bristol, UK

SCEEM (School of Engineering) Outreach Ambassador

Oct 2019 - Jun 2020

The role required me to go to schools in the Bristol area and deliver STEM workshops and presentations for students ranging from 10-18 years.

Assistant, Urban Gulls Flight, Fluid and Aerodynamics Research Group Nov 2019 - Feb 2020 Duties included helping Cara and Anouk give talks on their research to high school students, conducting workshops and helping repair drones used in their presentations.

ACHIEVEMENTS

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

Silver, Gold Award

2017, 2018

Duke of Edinburgh Award

Bronze, Silver Medal

2015, 2016

UK Mathematics Challenge

TECHNICAL SKILLS

- Languages: Python, MATLAB, limited experience in C and R
- Operating Systems: MS Windows, MacOSX, Unix/Linux
- 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

MEMBERSHIPS AND Student Member, Institute of Mathematics and it's Applications, UK

Dec 2019 - Present

Affiliations

Student Member, Australian Mathematical Society, Australia

Jul 2020 - Jul 2021

LANGUAGES

English

Native proficiency

Marathi

Native proficiency

Hindi

Fluent

French

Professional working proficiency

References

Available upon request