

**in** LinkedIn: [www.linkedin.com/in/vedangjoshi/](https://www.linkedin.com/in/vedangjoshi/)

EDUCATION	<b>King's College London</b> , London, UK <b>Oct 2023 - Present</b> Doctor of Philosophy - PhD, Computational Engineering Research Interests: Development of theoretical and computational fluid dynamical techniques to model natural swimming flow problems. Focus on the emergence of swarming behaviours in fish. Part-time PhD, funded by Boeing Defence UK Ltd. Advisors: Dr. Julia Li and Prof. David Moxey
	<b>University of Bristol</b> , Bristol, UK <b>Sept 2018 - Jul 2022</b> Master of Engineering - MEng (Hons), Engineering Mathematics Dissertation: A lateral line sensor based mechanistic algorithm for emergent fish schooling behaviours in multi-agent swarms Advisors: Prof. Sabine Hauert and Dr. Elliott Scott Activities and Societies: Bristol Engineering Mathematics Society, Bristol Swimming Society, Bristol Ice Skating Society
INDUSTRY EXPERIENCE	<b>Boeing Defence UK Ltd, a subsidiary of The Boeing Company</b> <b>Sept 2024 - Present</b> <i>Software Engineer II</i> Responsibilities include leading requirements capture, high level design documentation for R&D projects, BoE and Business User Story development. Other responsibilities include internal code reviews and stakeholder engagement on BDUK software engineering projects.  <i>Rotational Graduate Scheme</i> <b>Sept 2022 - Sept 2024</b> Two-year graduate rotational scheme with $4 \times 6$ month rotations around the UK. <ul style="list-style-type: none"><li>• Market Intelligence, Prosperity &amp; Economic Data, UKDSC (Secondment), Farnborough, UK [Jan 2024 - Sept 2024]</li><li>• Strategic Experimentation &amp; Analysis, Fleet, UK [Sept 2023 - Dec 2023]</li><li>• Research, Development &amp; Engineering Strategy, Bristol, UK [March 2023 - Aug 2023]</li><li>• TLCS-2 Project Engineering, Gosport, UK [Sept 2022 - Feb 2023]</li></ul>
RESEARCH EXPERIENCE	<b>University of Cambridge</b> , Cambridge, UK <b>Jun 2021 - Sept 2021</b> <i>Research Assistant, Epidemiology and Modelling Group</i> <ul style="list-style-type: none"><li>• Advisors: Dr. Renata Retkute, Dr. Cerian Webb and Prof. Chris Gilligan</li><li>• Spatially-explicit stochastic dynamic epidemiological simulations on Citrus Huanglongbing.</li><li>• Modelling the spread of tree pests through road networks using stochastic simulations. Efforts acknowledged in Modelling the spread of tree pests and pathogens in urban forests.</li></ul> <b>Imperial College London</b> , London, UK <b>Jun 2020 - Oct 2020</b> <i>Research Assistant, Biomathematics Group</i> <ul style="list-style-type: none"><li>• Advisors: Dr. Florian Klimm and Prof. Nick Jones</li><li>• Node-centralities in mitochondrial protein interaction networks for predicting gene essentiality.</li></ul>
TEACHING EXPERIENCE	<b>University of Bristol</b> , Bristol, UK

	<p><i>Demonstrator (Teaching Assistant)</i> <b>Jan 2022 - May 2022</b>  EMAT10006 Further Computer Programming: Fundamentals of programming in Python. Taught basic software engineering skills (OOP etc.) and collaborative programming skills.</p> <p><i>Demonstrator (Teaching Assistant)</i> <b>Sept 2021 - May 2022</b>  EMAT22220 Mathematical and Data Modelling 2: Coursework based module designed to apply mathematical modelling and data analysis skills to the solution of problems of academia &amp; industry.</p> <p><i>Demonstrator (Teaching Assistant)</i> <b>Sept 2020 - May 2021</b>  EMAT10704 Discrete Mathematics 1: 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.</p>	
ACHIEVEMENTS	<p><b>The Boeing Company Cash Prize</b> <b>2023</b>  <i>Research, Development &amp; Engineering Strategy, Nov 2023</i>  Going above and beyond to conduct testing in support of an IRAD growth project during my second 6 months in the graduate scheme.</p> <p><i>TLCS-2 Project Engineering, May 2023</i>  Delivering the responsibilities of a Project Engineering level 4 Technical Lead Engineer during the first 6 months of the graduate scheme.</p> <p><b>Academic Achievement Award</b> <b>2018</b>  <i>Royal Wootton Bassett Academy</i>  One of 18 recipients: For outstanding achievement in A-Level results</p> <p><b>Award for Services to the School &amp; Community</b> <b>2018</b>  <i>Royal Wootton Bassett Academy</i></p> <p><b>Bronze, Silver Medal</b> <b>2015, 2016</b>  <i>UK Mathematics Challenge</i></p>	
TECHNICAL SKILLS	<ul style="list-style-type: none"> <li>• <b>Programming Languages:</b> Python, MATLAB</li> <li>• <b>Operating Systems:</b> MS Windows, MacOS/iOS, Unix/Linux</li> <li>• <b>ML/Statistical learning frameworks [Python]:</b> 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</li> <li>• <b>High Performance Computing (HPC):</b> SLURM, Moab/Torque proficient</li> <li>• <b>Software:</b> Maple, Jupyter Notebook/Google Colab, QGIS (Open Source Geographic Information System), GitHub, MS Office</li> <li>• <b>Project Management:</b> JIRA</li> <li>• <b>Typography:</b> L<sup>A</sup>T<sub>E</sub>X</li> </ul>	
MEMBERSHIPS AND AFFILIATIONS	<p>Associate Member, The Institute of Engineering and Technology, UK</p> <p>Associate Member, The Institute of Mathematics and its Applications, UK</p>	
LANGUAGES	<p><b>English</b> <b>Native proficiency</b></p> <p><b>Marathi</b> <b>Native proficiency</b></p> <p><b>French</b> <b>Professional working proficiency</b></p>	

REFERENCES

**Available upon request**