

Akash Trivedi

• Wolfson College • Linton Road • Oxford • OX2 6UD •

Education

University of Oxford: 2016 – Present

- **DPHil Student in Engineering Science:** High strain rate properties of particulate composites
 - **Scholarship:** European Office of Aerospace Research and Development, US Air Force.
 - **Chair:** Engineering Science Graduate Joint Consultative Committee, representing all graduate students in the department; voicing and acting on their concerns.
 - **Chair of the General Meeting:** Elected Student President of Wolfson College, Oxford
 - **Junior Member:** One of three elected students to the Wolfson College Governing Body, acting as a trustee and representing the student voice at strategic meetings.
 - **Founding Member:**
 - **Class Act**, an Oxford Student Union campaign supporting students from low income, working class, first generation and state comprehensive backgrounds.
 - **Graduate Access Working Group**, lobbying for policy changes to better support underrepresented students applying to and studying at postgraduate level.

University of Nottingham: 2014 – 2015

- **PGCE (Science), Merit**

Imperial College London: 2010 – 2014

- **MEng Aeronautical Engineering: 1st Class Honours (Y4 - 74% Y3 - 76% Y2 - 82% Y1 - 83%)**
 - **1st place** in group wind turbine design project: Best Design and Overall Performance.
 - **Dean's List**, recognition for being in the **top ten of my class**.
 - One of 45 recipients of the **Eliahou Dangoor Scholarship**: Excellence in academics.

Wyggeston and Queen Elizabeth I College, Leicester: 2008 – 2010

- **A Levels:** Physics **A***, Chemistry **A***, Mathematics **A***, Further Mathematics **A***

Teaching Experience

Christ Church College, University of Oxford, Stipendiary Lecturer: October 2018 - Present

- Tutor first and second year undergraduate Engineering Science students through core curriculum.

University of Oxford, Department Tutor: October 2017 - Present

- Tutored five groups through the Engineering Science 3rd year undergraduate Materials option course.
- Conducted mock interviews, tutorials and admissions preparation for students on outreach projects.

Oxford Scholastica Academy, Engineering and Technology Senior Tutor: Summer 2018

- Led the comprehensive Engineering course for students aged 14-18 and the Technology course for younger students over a series of three two-week summer schools.

Magdalen College School, Waynflete Academic (Physics): AY 2017/18

- Support students through a Physics enrichment curriculum and with their university applications.
- Conducted mock Oxford interviews and PAT test preparation.

Oxford Scholastica Academy, Engineering Tutor: Summer 2017

- Led groups of students aged between 14 and 17 through a comprehensive Engineering curriculum over the course of a two-week summer school to prepare students for undergraduate Engineering.

Judgemeanow Community College, Teacher of Science: AY 2015/16

- Supported just over 200 students through the Science curriculum in KS3 and KS4.
- Founded and ran afterschool Science Club; managing two other teachers.
- Organised school-wide events for British Science Week including a trip to the Royal Society.

Fullhurst Community College, Teacher of Science: AY 2014/15

- Led approximately 150 students through the Science curriculum in KS3 and KS4.
- Established the afterschool Science and Engineering club; managing two teachers and a technician.
- Set up and maintained the department's social media presence on Twitter @FullhurstSci.

Publications

- Trivedi, A. & Siviour, C., 2018. Predicting the high strain rate response of plasticised poly(vinyl chloride) using a fractional derivative model. *EPJ Web of Conferences*, 183, p.01013.
- Trivedi, A. & Siviour, C., 2018. Framework for analyzing hyper-viscoelastic polymers. In *AIP Conference Proceedings* (Vol. 1979, No. 1, p. 090013). AIP Publishing.
- Babra, T.S., Trivedi, A.R. et al., 2017. Fluoride degradable and thermally debondable polyurethane based adhesive. *Polymer Chemistry*.
- Trivedi, A.R. & Siviour, C.R., 2017. A framework for analyzing hyper-viscoelastic polymers. *Constitutive Models for Rubber X: Proceedings of the European Conference on Constitutive Models for Rubbers X (Munich, Germany, 28-31 August 2017)*. CRC Press, pp. 529–535.

Conferences and Meetings

- **International DYMAT Conference**, Arcachon, France: Sep 2018
- **BSSM Experimental Mechanics Workshop**, University of Southampton: Apr 2018
- **European Space Generation Workshop**, Bucharest, Romania: Mar 2018
- **Occupy Mars Seminar**, Wolfson College, Oxford: Mar 2018
- **Mars Desert Research Station (Expedition 184)**, Utah desert, USA: Dec 2017
- **BSSM 3rd PGEM Conference**, Imperial College, London: Nov 2017
- **PhotoDyn Industrial Engagement Event**, University of Southampton: Sep 2017
- **European Conference on Constitutive Models for Rubbers**, Munich, Germany: Aug 2017
- **APS Conference on Shock Compression of Condensed Matter**, St. Louis, USA: Jul 2017
- **UK Space Conference**, Manchester, UK: May 2017
- **European Space Generation Workshop**, Paris, France: Mar 2017
- **United Nations Committee on the Peaceful Uses of Outer Space (Scientific and Technical Subcommittee)**, Vienna, Austria: Feb 2017
- **Poster Evening**, Wolfson College, Oxford: Feb 2017
- **BSSM 2nd PGEM Conference**, Mansfield College, Oxford: Dec 2016

Awards and Prizes

- **Armourers' and Brasiers' Company and AWE Gauntlet Trust Travel Award** (2018)
- **Wolfson College Travel Award** (2018)
- **Department of Engineering Science Travel Award** (2017)
- **Wolfson College Field Research Award** (2017)
- **British Society of Strain Measurement's Award for Best Presentation – 2nd Place** (2017)
- **American Physical Society Student Travel Award** (2017)
- **European Office of Aerospace Research and Development, US Air Force Scholarship** (2016)

Work Experience

Royal Air Force, Reservist (Oxford University Air Squadron): Nov 2016 – Feb 2018

- Commenced Elementary Flying Training syllabus for RAF pilots on Grob "Tutor" 115E.

EY, Consultant Intern: Aug 2015

- Compared KPIs of a Big 6 energy supplier to others in the sector highlighting areas of improvements.
- Authored thought leadership article on technological innovation to better serve vulnerable customers.

UK Civil Service (Department for Work and Pensions), Summer Intern: Jul – Sep 2013

- Worked on resolving a payment litigation, which saved the taxpayer £200,000.
- Led a team of 15 through competitive social enterprise activity winning 3 out of 5 awards on offer.

Airbus Defence and Space (Astrium), Propulsion Engineering Intern: Jun – Sep 2012

- Designed components and conducted analyses for BepiColombo, EarthCARE, and LISA satellites.
- Prepared documents for the Critical Design Review presented to the European Space Agency.

HSBC, Global Banking and Markets Intern: Mar 2012

- Presented to COO of Global Research on how a MNC can break into BRIC/Next Eleven economies.

Voluntary Experience

Royal Aeronautical Society, Young Person's Network Representative: May 2018 – Present

- Coordinate between young people in the Oxford area and the local Royal Aeronautical Society branch to co-host events and increase membership amongst young people.

St John Ambulance, First Aider: May 2017 – Present

- Completed the First Aid at Work course and I am one of the Departmental First Aiders.

Space Generation Advisory Council in Support of the United Nations Programme on Space Applications, UK National Point of Contact: Aug 2014 – June 2018

- Liaise with UK space organisations to build collaborations and manage the social media presence.

Wyvern Primary School, Governor: AY 2014 – AY 2016

- Sat on the Finance, Teaching and Learning and Headteacher Appraisal committees.

STEMNET, STEM Ambassador: Mar 2013 – Jul 2014

- Assisted NASA, Tomorrow's Engineers and Engineers Without Borders at The Big Bang Fair.

Imperial College Students for the Exploration and Development of Space (ICSEDS), Outreach Officer: Aug 2012 – Aug 2013

- Managed and coordinated the outreach team, organising several outreach projects.

International Association for the Exchange of Students for Technical Experience (IAESTE), London Committee Member: Sep 2011 – Feb 2013

- Assisted in the day to day running of the committee and also involved in strategic decisions.

London 2012 Olympics, Games Maker: Jul – Aug 2012

- Managed relationships with various residents of the Village, including; athletes, coaches and VIPs.

Seri Setia (Kuala Lumpur, Malaysia), Teacher of English as a Foreign Language: Jul 2011

- Led team of 45 volunteers and 200 participants through a major English development workshop.