Dear Reader - Michaelmas 2012

This second issue of the annual record for engineering people at Wolfson includes the 2012 intake of undergraduates and supervisors (and a full list of our Firsts). The College website already includes a link to Wolfson Engineer (Vol 1) for those intending to apply for undergraduate engineering places have some insight into those already involved here.

Students

First Year (Part 1A) Luechao Wen writes:

Hi everyone, I am Wen Luechao from China. Those have difficulties in pronouncing Chinese name can call me Wesley. I am a first year engineering student. I took my O & A levels in Singapore before I come to Cambridge so I am quite familiar with that country. Other than Chinese and English, I also speak Teochew and a little bit Cantonese, and plan to learn some German in the language program. I am not sure which engineering area to specialize in at the moment, but I will figure it out in two years' time. Cambridge is a beautiful place with lots of greens, and I enjoy my times here so far. One more thing to add. The Baker Building of the Engineering Department let me think of the Baker Street in the book Sherlock Holmes. I don't know if there is any relation between these two but as an engineer, I hope myself to be as analytical, as practical as Holmes, or more.

First year (Part 1A) Alfred Tan writes:

Hi everyone, Alfred here!! It's a dream come true to study Chemical Engineering in Cambridge, a world-class institution which addresses the multi-disciplinary demands of the industry. Upon graduation, I aspire to be a Professional Engineer specialising in Plant Design and was privileged to commission the largest MBR Wastewater Plant in Singapore. As an individual, I am convinced and committed to help bring simple but workable engineering design to third world economies. Being able to innovate technology, and apply engineering knowledge to help the unprivileged, gives me immense gratification that cannot be described in mere words. When I am not studying, I enjoy playing tennis and working with children. I am truly humbled to receive the prestigious Wolfson Cambridge Scholarship. With this award, I am further encouraged to strive towards the Chartered Engineer status.
Bob Chen (First Year) writes:
Hi, I am Bob from China though I have been staying in Singapore for the past four years, taking my A-Levels. I am doing the first year Engineering now and intending to specialise in Electrical and Electronic Engineering after the second year, because of my strong interests in assembling, constructing and programming robots. Besides spending time in academia, I like to play tennis and to socialise with my friends. Also, I was a member of Guitar Ensemble in my junior college, so I like to play the guitar, especially solo, duet and ensemble pieces. As the University of Cambridge and Wolfson College have so many societies and clubs to join in, certainly I would meet many like-minded people. University is a new start in my life; I will focus on my academic work and, more importantly, will cherish the experience and the friendships here.

David Wei (First year) writes:
Hi! I'm Junyu from Singapore, currently pursuing an undergraduate degree in Engineering. I graduated from Raffles Junior College in 2009 and during my second year of national service in the army applied to the University of Cambridge. I am currently on an overseas scholarship from the Infocomm Development Authority of Singapore, and I am considering specialisations in the electrical or information fields. I am extremely happy to be given the chance to study and learn from some of the brightest minds from all over the world. Besides being a beautiful town with an amazing history, Cambridge promises something for everyone; with thirty-one colleges and hundreds of societies, you can be sure to find something that caters to your passions. Wolfson College is also a superbly friendly and international college, and allows you to feel perfectly at home while giving you the opportunity to make friends coming from all walks of life. Lastly, despite the challenges the workload sometimes impose, you'll find that there will be plenty of support from friends and the staff here!
First year Jonathan Zhou writes:

Hi! My name is Changwei and I am a first year Engineering undergraduate student from China. I studied in Singapore before coming to Cambridge. My area of interest is in electrical and electronics engineering, which I hope to pursue in the future. When I am free, I like to take a walk in the town or go to the gym. I really enjoy my time here in Cambridge which is a wonderful small town enriched by culture and tradition. If you take a walk in the town, you may randomly run into something like ‘Charles Darwin lived here’ or ‘Stephen Hawking building’. Wolfson College is amazing. Not only does it have all the facilities you expect to use, but more importantly, it has a really friendly and helpful environment.

Michael Zhu (Third year) writes:

Hi everyone, I am Michael. I accomplished one-year A-Level in London before I came to Cambridge. My third year specialization is information and computing engineering. Although the academic life in Cambridge is highly demanding and fast paced, I enjoy it so far because it gives me many opportunities to apply the theoretical knowledge into practice and solving the challenging problems. Apart from the academic work, I am passionate about writing codes and debugging therefore I did an internship in Shanghai this summer designing windows application program. Upon graduation, I still haven’t made up my minds what I am going to do in the future but hopefully, it will be sorted out after I find out whether my specialization suits me or not. My extracurricular interest is playing football and I am a member of the Chinese Students and Scholars Association football team and we’ll participate in the division II of MCR league this year.
Dr. Haider Butt

Haider Butt did his BEng (hons) in Engineering from National University of Computer and Emerging Sciences, Pakistan in 2007. He received his PhD from the Department of Engineering, University of Cambridge, in 2012. His doctoral thesis was focused on photonic devices based on carbon nanotubes and silicon nanopillars. Following his PhD Haider was appointed as the Post-Doctoral Research Assistant in nanophotonics at Electronics, Power and Energy Conversion research group, University of Cambridge. In October 2012 Haider was awarded a Henslow Research Fellowship at Wolfson College. He received an Ambitious Research Award from the Institution of Engineering and Technology (IET) in 2010. His research interests include nanophotonics, metamaterials, nano-structured materials and liquid crystals. His recent research work, on nanotubes based holograms - reported in Advanced Materials Journal - received a wide news coverage from both national and international media.

Dr Eleanor Voss

Eleanor Voss graduated from Cambridge University in 2009 having completed a BA and a MEng in Civil, Structural and Environmental Engineering. She then returned to Cambridge in October 2009 to start her PhD under the supervision of Dr Overend. Eleanor’s research area is the use of Building Information Modelling within the facade industry as a tool for facade consultants to communicate effectively and work collaboratively with sub-contractors and manufacturers. The research is jointly funded by the EPSRC and the industrial partner Ramboll UK. Along side working towards her PhD Eleanor has supervised structures and materials courses in the Engineering Department and lectured in Structural Engineering in the Architecture Department at Cambridge. Eleanor is currently a Teaching Assistant in the Engineering Department, supervising the undergraduates through their laboratory work.
Marco Zaccaria

Started his PhD at University of Cambridge in October 2011 as part of the gFT research group. He graduated in Building Engineering at the Technical University of Bari in 2010 and subsequently worked at the Italian Institute of Technology where he undertook research on the enhancement of mechanical properties of nanostructural materials. In 2009 he spent 6 months as a visiting research student within the gFT research group where he investigated steel-to-glass adhesives connection as well as the strength of naturally weathered glass. His PhD project on Monolithic fire-resistant structural curved glass is supervised by Dr Mauro Overend.

Ed Flaherty

Ed Flaherty graduated from the State University of New York with BS’s in Physics and Electrical Engineering. He then spent 12 years working for Texas Instruments in Houston TX, Nice France, and Cambridge UK developing microprocessors and systems on chip for the automotive and mobile phone industries. Having spotted the trend toward more sophisticated mobile phones, he was the first to advocate the ARM processor for use in a mobile phone application, leading to the creation of the world’s first “smart phone” chip. He has more recently held management positions with Sony, Altera, and Magnum Semiconductor, responsible for the development of multimedia chips and applications. Ed has experience in nearly all aspects of system-on-chip development, from sand to software, and he is now very much looking forward to taking a role in course supervision at Wolfson.

Emily Woodhouse

Emily graduated from Cambridge University in 2012 with an MEng in Civil, Structural and Environmental Engineering. Emily’s forth year project was entitled Thermal Analysis of Schools. This involved creating a computer model of one of the boarding houses in the Leys School (just over the road from CUED), testing it against collected data and then simulating new scenarios in the model that could improve the thermal performance of the building. Emily currently works for AECOM as a member of their Sustainable Development Group; several of her projects are for developments in Cambridge.
Undergraduate Students

Part 2B:
Shaun Chng, Jeffrey Lee and Jerry Thia

Part 2A:
Ke Chen, Ming Qing Foo, Francis Godden, Erik Rosén, Michael Zhu

Part 1B:
Jonathan Godden, Xiao Lan, Shaun Lim, Luke Ng, Aik Khim Tan, Xian Jie Tay

Part 1A:
Bob Chen, Wesley Wen, Jonathan Zhou, David Wei, Alfred Tan

Prospective students 2013: (deferred entry) : (new entry)
Matthew Laskey, Samuel Willis, Jack Kelleher: ???

Prizes and Achievements

Wolfson engineering students have generally performed rather well in their Tripos exams and in Easter 2012 everyone achieved either a First or a Second Class result. The Wolfson Review for 2011-2012 unfortunately missed reporting the 4 Part 1 First of our 6 Firsts as shown here:

Jennings Prizes for First Class or Distinctions in University Exams
Jeffrey Lee (2A), Jerry Thia (2A), Ming Qing Foo (1B),
Erik Rosén (1B), Aik Khim Tan (1A), Shaun Lim (1A)

Library Resources

Jenny Sargent is the Librarian at Wolfson College, and works with Steve and his colleagues to provide the taught Engineering students with access to the books they need to support their studies. She is happy to receive suggestions for additions to the Library’s collection and to help students with their information needs in any way she can. To contact Jenny please email
library@wolfson.cam.ac.uk.

Supervisors

The Wolfson Part 1 supervisors during the 2012-2013 academic year will include

Part 1A (1st year): Dr Ajith Parlikad (mechanics), Mr Marco Zaccaria (structures), Mr Malcolm Morgan (maths), Dr Haider Butt (computing, electromagnetics), Dr Wen-Kai Hsiao (materials, thermodynamics), Mr Ed Flaherty (digital processing) and Dr Steve Hoath (dimensional analysis, physical basis of electronics, linear circuits);

Part 1B (2nd year): Dr Ajith Parlikad (mechanics); Dr Claire Barlow (materials); Dr, Dr Ronan Daly (maths), Miss Eleanor Voss (structures, Michaelmas) and Miss Emily Woodhouse (structures, Lent), Dr Steve Hoath (electrical), Dr Sithamparanathan Sabesan (linear systems & control) and Dr Timos Kipouros (thermodynamics).

Goodbyes & Hellos

Ioannis Mitsos (1B Linear Algebra), Garfield Guan (1B structures), Haider Al-taie (1A computing, electromagnetics) and Evros Loukaides (1A structures) completed supervision work for Wolfson last year and we wish them every success in the future.

We welcome Dr Haider Butt (1A computing, electromagnetics), Mr Ed Flaherty (1A digital processing), Miss Eleanor Voss (1B structures, Michaelmas 2012), Miss Emily Woodhouse (1B structures, Lent 2013) and Mr Marco Zaccaria (1A structures) to our supervision team.

2012 Matriculation Dinner (First Years + DoS) held on October 17th
Ke Chen writes: I was mainly involved in project Rail Overbuild assigned by Network Rail. I researched project background and produced basic engineering drawings using AutoCAD. I also used Excel to create mathematical models to analyze different loading cases and material capacity. I was responsible for presentation preparations for clients and sub consultants, including compiling design data and making PowerPoint slides. Furthermore, I led clients for site seeing and conducted detailed structural analysis and design for all sites. Lastly, I gathered documents and produced final solution schemes to the clients. I developed strong technical and analytical skills through creating mathematical models and structural designs. Moreover, attending meetings and site seeing with clients strengthened my interpersonal and communication skills. Working in a team enhanced my teamwork and organizing skills and also taught me to quickly adapt to new working environment.

Erik Rosén writes: I'm a 23 year old Swede and just started my 3rd year of the Engineering Tripos. When I'm not in Cambridge, I spend my time sailing in the Stockholm archipelago or alpine skiing. This summer I worked at Siemens Magnet Technology in Oxford who manufacture superconducting magnets that are used in MRI-scanners. I worked on some projects aiming to reduce the amount of liquid helium used to cool the magnets down to -269°C (Very cold!). It was a very multidisciplinary experience, where I really had use of the breadth of the Cambridge course! This year I'll be specializing in Information Engineering and I'm really looking forward to learning more about all that it entails!
Whats ON

Freshers Day was Thursday 4th October – last week! Hope you all sampled it!

Wolfson Science Society
We will host a great selection of speakers coming from the Departments of Genetics and Engineering of the University of Cambridge, the European Space Agency and the University of Aberdeen. Talks will take place on Fridays at 6:15 pm, normally at the Old Common Room (note the change of venue on 23 November). As usual we will meet slightly earlier for drinks. After the talks there will be time for discussion and questions before moving upstairs to formal hall at 7.30pm.

Friday 12 October, Old Combination Room
Dr Damian Crowther (Alzheimer's Trust Senior Research Fellow, Department of Genetics, University of Cambridge) Could the ageing be infectious?

Friday 26 October, Old Combination Room
Dr Eoin Macdonald-Nethercott (European Space Agency and Alumnus) 90 days of night: A year in Antarctica at the French/Italian base Concordia Station

Friday 9 November, Old Combination Room
Dr J Clifford Jones (School of Engineering, University of Aberdeen) Issues in fuel supply and utilisation

Friday 23 November, Gatsby Room
Professor Rick Mitchell (Visiting Professor of Innovation Management, Department of Engineering, University of Cambridge) The Great Ink Crisis

All Wolfson Engineers are encouraged to attend these talks. I will be the Chair at the last talk.

Wolfson Research Day – Friday 3rd May 2013 – Lee Hall
College will hold a series of talks and discussions of posters about the research by Wolfson students – postgrads, undergrads, post-docs, Fellows, Emeritus Fellows etc. There will be Formal Hall afterwards for all speakers and their guests and prizes will be awarded for the best student contributions. We hope that students from St Antony’s College Oxford (sister college) will also contribute to Wolfson’s day of celebration. See posters at Freshers Day.

We have plenty of space for postgraduate students to make their presence known to us all! The Research Day covers all academic disciplines, not just Engineering.

Final words
Thanks to all the new students and supervisors for contributing to this Vol 2 at short notice. As we get slicker at communicating we hope to include new postgraduates and others in the Wolfson Engineer. All errors are down to the compiler and all credit to those featured here.
Have a good year and hope to see some applicants who have read and appreciated accessing a snapshot of the people working at Wolfson – you will be assured of a very friendly welcome.
http://www.wolfson.cam.ac.uk

Dr Steve Hoath (sdh35) 8th October 2012