

EDUCATION	PHD MODELLING BIOLOGICAL COMPLEXITY, UCL	2014-2017
	MRES MODELLING BIOLOGICAL COMPLEXITY, UCL • Graduated with distinction	2013-2014
	MENG ENGINEERING SCIENCE, UNIVERSITY OF OXFORD • Upper-second class • Franklin prize for best Masters thesis, Keble College	2009-2013
	YSTALYFERA COMPREHENSIVE SCHOOL • 3 As and 1 AS at A-Level, 13 GCSEs, 'Academic Achievement Award' and Best GCSE Results Award'	2002-2009
MRES WORK	<i>Structure Learning in Redundant Motor Tasks</i> • Experimental procedure studied motor learning performance in task where on-screen cursor is controlled by a linear mapping of participants' joint angles, monitored via a data glove • Models developed based on participant's natural statistics to predict learning strategies	2012/13
	<i>A Computational Model of Neurite Regeneration in Artificial Conduits</i> • Stochastic modelling of neurite growth through variable geometries • Constructing collagen conduits for nerve regeneration	2012/13
	<i>Active Learning Approaches to Identifying Animals in Camera Trap Images</i> • Study of supervised, semi-supervised and active learning algorithms	2012/13
	<i>Engineering Microbes to Sense and Eradicate Pathogens</i> • Stochastic and deterministic modelling of gene networks • In depth knowledge of important topics within synthetic biology	2012/13
MENG WORK	<i>Two-Phase Flow in the Microvasculature - MEng Thesis</i> • Mathematical modelling of fluid flow in blood vessels	2012/13
	<i>Thermal Mass in a Desert Bioreactor - Computational Project</i> • Numerical modelling of heat transfer mechanisms	2011/12
	<i>Semi-Autonomous Wheelchair - Design Project</i> • Designed sensing and wireless charging systems	2011/12
SKILLS	<ul style="list-style-type: none"> <li>• C++, MatLab, Python, Mathematica</li> <li>• SolidWorks</li> <li>• Circuit Design and Micro-Controller Programming</li> </ul>	
EXPERIENCE	<i>Freelance Writer for Media Planet, Independent Content Supplier, London</i> • Published as supplement inside <i>The Guardian</i> newspaper	2013/14
	<i>SysMIC Course Developer, UCL, London</i> • Online interactive maths learning resource for students in the life sciences	2013/14
	<i>Simple at CoMPLEX, UCL, London</i> • Outreach programme promoting mathematical modelling to school students	2013/14
	<i>UCL Loo Festival, London</i> • Represented UCL in eco-friendly toilet design competition	2013/14
	<i>Volunteer Tutor to Underprivileged Students, The Access Project, London</i>	2012/13
	<i>Teacher at Oxford Royale International Summer School, Oxford</i> • Wrote and taught the 'Engineering Preparation' course (40+ hours of material)	2012/13
	<i>Staff Writer at Bang! Science Magazine, and Oxford Student Newspaper, Oxford</i> • Contributed articles based on interests in bioscience and culture	2012/13
HOBBIES	• Cycled 2000 Km from Toulouse to Vienna	2013
	• Grade 8 Distinction, Violin - Awarded the 'Don Preece Memorial Prize'	2006
	• Ecuador Expedition - Fundraised over £3000 to assist with community projects	2008
REFEREES	Joern Diedrichsen - j.diedrichsen@ucl.ac.uk Stephen Payne - stephen.payne@keble.ox.ac.uk	