Evripides G. Loukaides

CONTACT

Department of Mechanical Engineering

INFORMATION University of Bath

Claverton Down Bath, BA2 7AY United Kingdom

RESEARCH INTERESTS Metal forming processes; Flexible manufacturing; Deployable structures; Multistable shells; Actuation mechanisms; Smart materials; Structural optimization; Machine learning.

APPOINTMENTS

University of Bath, Bath UK

Lecturer in Solid Mechanics

 $Sep\ 2016$ -

This position in the Department of Mechanical Engineering combines my interests in Manufacturing and Smart Materials, since the Department has a long tradition and activities in both.

University of Cambridge, Cambridge UK

Research Associate in Applied Solid Mechanics

Postdoctoral position on flexible metal forming methods with the Low Carbon Materials Processing group, under the supervision of Prof. Julian Allwood.

EDUCATION & QUALIFICATIONS

University of Cambridge, Cambridge UK

PhD, Engineering

Oct 2009 - Sep 2013

Oct 2013 - Jul 2016

In the Advanced Structures Group and under the supervision of Dr Keith Seffen, studied multistable shells; a category of structures that is capable of maintaining load in different geometries.

Columbia University, New York, NY USA

M.S./Professional Degree, Civil Engineering

Aug 2007 - Oct 2009

Massachusetts Institute of Technology, Cambridge, MA USA

B.S., Civil Engineering, GPA: 4.5/5

Aug 2003 - Jun 2007

Lanitio Lyceum B, Limassol, Cyprus

Highschool Diploma, June 2001

- GPA: $19\frac{10}{11}/20$
- Mathematics and Science Concentration

London Examinations, Limassol, Cyprus

GCE A Levels, 1998–2002

- Physics, Pure Mathematics, Mechanics, Statistics, Chemistry, Modern Greek
- All with grade A

AWARDS

Elected to a Research Fellowship at Darwin College, Cambridge, 2014

Research Fellows are elected by the College's Fellowship after a competition and are voting members of The Governing Body of the College, contributing to its academic and social life.

Pheiffer Scholarship for Graduate Students by Girton College

Scholarship for postgraduate studies by the Onassis Foundation

Scholarships for undergraduate and PhD studies by the Cyprus State Scholarship Foundation

Honorable Mention in the MIT \$100K Executive Summary Contest 2008 (as head of the AdBakery.com team)

Fulbright scholarship for undergraduate studies

National and International Olympiads in Physics and Mathematics

- International Mathematics Olympiad, U.S.A. 2001 Awarded Bronze Medal
- Balkan Mathematics Olympiad, Yugoslavia 2001
- National Mathematics Olympiad, Cyprus 2000 Awarded Gold Medal
- National Physics Olympiad, Cyprus 1998 Awarded First Prize

TEACHING EXPERIENCE

University of Bath, Bath, UK

Unit convenor Feb 2017 -

Prepared, delivered and assessed ME20026: Manufacturing Technologies and Operations. This is a mandatory course for all second year Mechanical Engineers (> 200 students).

University of Cambridge, Cambridge, UK

Supervisor, demonstrator and teaching assistant Oct 2010 - Jun 2015

Admissions interviewer (Corpus Christi College) Dec 2014

Columbia University, New York, NY USA

Teaching assistant

Sep 2007 - May 2009

FUNDED RESEARCH PROJECTS

- Investigation of Process Limits for Mandrel-Free Spinning (MFS). £50,000. Sponsor: EPSRC Researcher in Residence Catapult. (PI)
- Automating the English Wheel. £11,000. Sponsor: University of Bath Engineering Faculty Fund. (PI) the project is also supported with a PhD studentship.
- \bullet FELDSPAR: Flexible Die-less Panel. £150,000. Sponsor: Innovate UK and subcontract by industrial partners. (PI)
- Automated and defect-free forming of complex composite parts with machine learning. PhD studentship. Sponsor: GKN.
- Asymmetric spinning investigation. £46,000. Sponsor: Nissan Japan Motors. (PI)
- Augmented Reality and CAD. £4,300. Sponsor: University of Bath Alumni Fund. (PI)

REVIEW ACTIVITIES

- Articles: Journal of Materials Processing Technology, Acta Astronautica, Proceedings of the Royal Society A.
- Proposals: British Council Newton Fund

Presentations

- Generating Multistability through Anisotropy. At the 10th European Solid Mechanics Conference, Bologna, July 2018.
- Multistable and morphing shells. Workshop on exploiting nonlinearity in multiple degree of freedom systems, Swansea University Bay Campus, June 2017.
- Elementary Morphing Shells: Behaviour and Actuation. *Engineering Department Structures Research Seminar*, Cambridge, 2012.
- A free-standing, doubly-curved, tristable shell. At the 8th European Solid Mechanics Conference, Graz, 2012.
- Elementarty Morphing Shells. Poster at the *SET for Britain* competition. House of Commons, London, 2013.

Professional Experience

Hinman Consulting Engineers, San Francisco, CA USA

Engineering Intern

Jun 2007 - Aug 2007

American Bureau of Shipping, Houston, TX USA

Intern Jan 2007 - Feb 2007

LEADERSHIP

Cyprus National Guard, Limassol, Cyprus

Second Lieutenant Jul 2001 – Aug 2003 Was responsible for training, supervising and the well-being of an army platoon.

COMMITTEE WORK

ICTP 2017 Organizing Committee

Oct 2014 - Jul 2016

The International Conference on the Technology of Plasticity was held in September 2017 in Cambridge, UK. This is generally considered the premier conference in this field and on average attracts more than 600 delegates from around the world. The Organizing Committee was overseeing all aspects of the preparation process.

Engineering Department Postdoc Committee Oct 2013 - Oct 2015

A group of 12 volunteers representing the Department's 280 postdocs in various Departmental and University committees, organizing professional and personal development events and advocating for greater postdoc involvement in decision-making processes.

Education & Research Committee, Darwin College Oct 2014 – May 2016 The committee oversees Darwin College's various seminars and outreach events, including the well-known Darwin College Lecture Series. Along with another College Fellow, organized the College's weekly science seminar.

LANGUAGES

Greek, English (Fluent) Spanish (Intermediate)

Interests

Guitar, Structures, Programming, Scuba diving (PADI certification)