# Dr. D. Harmanto CEng MIED FHEA

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## **Research Interests**

Vehicle Aerodynamics • Healthy Building • Hydrodynamics (War Ship Design) • Finite Element Analysis • Design Optimisation • Product Development • Natural Material Development • Wind Turbine Application • Renewable Energy • Lean Management

#### Key Points / Recognition

Lecturer of the Year 2017 – 2018 | College of Engineering and Technology, University of Derby

**Programme Leader for BEngs, Derby University (2007 – 2017):** Improved number of students achieving good honours degrees by over 30%; consistently ensured that NSS based value for BEng (Hons) Mechanical Engineering was above 87% and that employability statistics for graduates into graduate level jobs was at 90%

Managing Director | International Indonesian Scholars Association for UK (2018 – 2020)

Honourable & Advisory Member | Lecturer Association of the Republic Indonesia (since 2016)

**Invitee - 'World Class Indonesian Scholars' Program** | Ministry of Research, Technology and Higher Education, Government of Republic of Indonesia – 11<sup>th</sup> – 18<sup>th</sup> August 2018 (Only 47 invited)

**Invitee - 'World Class Indonesian Scholars' Program** | Ministry of Research, Technology and Higher Education, Government of Republic of Indonesia,  $17^{th} - 22^{nd}$  December 2017 (Only 38 invited)

**Invitee - 'Visiting World Class Professors' Program** | Ministry of Research, Technology and Higher Education, Government of Republic of Indonesia,  $17^{th} - 23^{rd}$  December 2016 (only 40 invited)

## Funding

**KTP:** Academic Supervisor for the Gardner Aerospace (£125K) - 2014; Academic Supervisor for the Eclipse Automotive Solution (£165K) - 2016; Lead Supervisor for the Penny Hydraulic (£165K) - 2017

**KEI:** Academic Leading for Eclipse Automotive Solution (£45K) - 2016; Academic Leading for S3Process Ltd (£45K) - 2017

**Newton Fund:** Submitted for Research Link 2015 (£45K); Submitted for Institutional Links for Renewable energy 2017 (£150K); Submitted for Institutional Links for Ship Design and Development 2018 (£75K); Submitted for NERC for Predicting the flooding in Jakarta using CFD 2018 (£350K)

InnovateUK: Submitted for Open Call July 2018 (£130K)

**Consultancy:** Engineering Analysis on Oil Filtration for Hydrotechnique (£8.5K) - 2009; CFD analysis for the hanging basket for Amberol Ltd. (£3.5K) - 2009; SolidWorks Short Course with West Notts College (£2.5K) - 2008; SolidWorks Simulation and FEA theory Short Course with Garrandale Ltd. (£7.5K) - 2008

## **Career History**

June 2020 – Present Associate Professor in Aeronautical Engineering, De Montfort University.

Feb 2001 – May 2020 Derby University, Derby

Jan 2019 – Present	Programme Leader for Degree Apprentice for Roll Royce (Mechanical Engineering and Material Engineering
Sept 2018 – Jan 2019	Acting Programme Leader of BEng (Hons) and MEng for Motorsport Engineering
Sep 2017 – Aug 2018	Assistant to Deputy Head of Mechanical and Manufacturing Engineering
Sep 2016 - Present	Lead of Research Cluster Advanced Design and Simulation
Oct 2016 – Apr 2017	Acting Deputy Head of Mechanical and Manufacturing Engineering
Aug 2007 – Jul 2017	Programme Leader for BEngs
Aug 2004 – Aug 2007	Programme Leader - BEng (Hons) Product Design Engineering
Feb 2001 – 2004	Programme Leader - Motorsport Technology
Apr 1999 – Sep 2000	Project Engineer   PADTEK Ltd (First Automotive), Coventry
Oct 1998 – Mar 1999	P/T Research Assistant in ZEFREDO   Coventry University
Mar – Apr 1998	P/T Lecturer - Design (2nd year undergraduate students)   Coventry University
Mar & Nov 1996	P/T Lecturer - Computer Aided Design (MSc)   Coventry University

#### Research

PhD Supervision: 4 PhD students

PhD Examiner: 2 PhD and 1 MPhil Internal Examiners

**Keynote Speaker:** Master 2017 – Indonesia National Seminar with the theme 'Indonesia Maritime'. Keynote on the Frigate Ship for Indonesia Sea Defence – PPNS, Indonesia (2017)

Book Review: SolidWorks Simulation for Absolute Beginners by CRC Press/Taylor and Francis Group (2016)

Journal Advisory Board: Research Script (international journals IJRE, IJREE, IJRCS, IJRME & IJMH) (2014)

#### **Journal Reviewer:**

- Proceedings of the Institution of Mechanical Engineers part A Z (mainly review paper for the Design, Computational Fluid Dynamics and Finite Element analysis [mostly part C, D and E]) (Since 2009)
- International Journal of Robotics and Mechatronics (Since 2010)
- Journal of Ocean, Mechanical and Aerospace Science and Engineering (Since 2011)

#### **Conference Reviews:**

- Technical Committee of IEOM conference 2019
- Reviewer for International Conference on Engineering Application, Physics and Sciences (ICEAPS2017)
- Reviewer for International Conference on Science, Technology and Humanity, Yogyakarta
- Reviewer for 1st International Conference on Materials, Energy and Manufacturing (1st ICMEM 2016)
- Reviewer for 2nd International conference in Science, Technology and Humanity (Since 2015)
- Chair session on 12th QiR International Conference, Bali, Indonesia (2011)

## Education

PhD in Automotive Engineering Design and Manufacture | Coventry University, Coventry, UK (1995 – 1999)

MSc: Automotive Engineering Design and Manufacture | Coventry University, Coventry, UK (1994 – 1995)

Ir. (B.Eng. Hon): Mechanical Engineering | National Institute of Technology, Malang, Indonesia (1987 – 1993)

## **Professional Memberships**

- Member of Committee of Education and Training, Institution of Engineering Designers, 2011, Member of Institution of Engineering Designers
- Member of Committee of Automobile Division (up to May 2016) East Midland, Institution of Mechanical Engineering, (current Fellow member application)
- Fellow Member Higher Education (2010)