MUHAMMAD IZHAM BIN ISMAIL

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School of Mechatronic Engineering, Kampus Tetap Pauh Putra
Universiti Malaysia Perlis

EDUCATION

Kyoto Institute of Technology, Kyoto, Japan *Apr 2009 - March 2015*
PhD in Mechanical Engineering
Computational Fluid Dynamics
Research in lattice Boltzmann method (LBM)

Kyoto Institute of Technology, Kyoto, Japan *Oct 2005 - Mar 2007*
M. Eng. in Mechanical and System Engineering
Computational Fluid Dynamics
Research in finite difference based lattice Boltzmann method (FDLBM)

Kyoto Institute of Technology, Kyoto, Japan *Apr 1999 - Mar 2003*
B. Eng. in Mechanical and System Engineering
Equivalent Cummulative GPA: 3.2

EXPERIENCE

Universiti Malaysia Perlis Apr 2015 - Present
Senior Lecturer, DS52 *Kampus Tetap Pauh Putra, Arau, Perlis*

· Teaching ENT342 Computational Fluid Dynamics
· Person-in-charge of EIT302 Industrial Training for Mechanical Engineering Program at PPK Mekatronik, UniMAP.

Universiti Malaysia Perlis Mar 2007 - Mar 2015
Lecturer, DS45 *Kampus Tetap Pauh Putra, Arau, Perlis*

· Teaching ENT342 Computational Fluid Dynamics, ENT241 Fluid Mechanics 1 and ENT482 Mechanical Design Project 1.
· Person-in-charge of EIT302 Industrial Training for Mechanical Engineering Program at PPK Mekatronik, UniMAP.
· Previously taught ENT 352 Computer Aided Engineering Design, ENT 361 Digital Electronics and Applications, EKT 120 Computer Programming and DNT 123 Computer Aided Drafting.

SONY EMCS(M) Sdn Bhd Jun 2005 - Aug 2005
Mechanical Design Engineer *Seberang Perai, Penang*

· Conduct design for mechanical parts, specifically headphone and related peripheral devices.
· Lead liaison with Japanese and Korean counterparts for new product introduction.

TOWA(M) Sdn Bhd Apr 2005 - May 2005
Mechanical Design Engineer *Bayan Lepas FTZ, Penang*

· Mechanical design for plastic injection jig.
· Machine control troubleshooting.

Renesas Technology(M) Sdn Bhd Apr 2004 - Dec 2004
Production Engineer *Bayan Lepas FTZ, Penang*

· Transistor and diode line assembly maintainence and troubleshooting.

· New product introduction team member.

TECHNICAL STRENGTHS

Languages	Malay, English, Japanese
Programming Languages	Fortran77/90/03, C/C++, Python, Scilab, Octave and GCC compilers.
CAE softwares	ANSYS(Fluent), Solidworks and AutoCAD.
Productivity applications	LaTex, Microsoft Office and Libre Office.
Technical expertise	Computational fluid dynamics, numerical method, fluid dynamics, GPU and OpenMP programming, OpenCL, NVIDIA CUDA, OpenBLAS library, GNU Scientific Library and MPICH.
Extra link	https://github.com/izham-sugita

PUBLICATIONS

JOURNALS

1) **M. Izham**, T. Fukui and K. Morinishi, Simulation of three-dimensional homogeneous isotropic turbulence using the moment-based lattice Boltzmann method and LES-lattice Boltzmann method, Journal of Fluid Science and Technology (JSFT), Vol. 9 (2014), pp 1-13

2) **M. Izham**, T. Fukui and K. Morinishi, Application of regularized lattice Boltzmann method for incompressible flow simulation at high Reynolds number and flow with curved boundary, Journal of Fluid Science and Technology (JSFT), Vol. 6 (2011), pp 812-822

PROCEEDINGS

1) M. N. Rahman Y., Z. M. Razlan, **M. Izham**, M. I. Omar, N. A. A. Zambri, A. B. Shahriman, I. Zunaidi and W. K. Wan, A Study on Possibility of CFD Simulation on Air Simulation in Minor Operation Theatre, 2018 IOP Conf. Ser.: Mater. Sci. Eng.429 012070

2) **M. Izham** and M. S. Mohamad, Application of entropically damped artificial compressibility method for incompressible unsteady flow simulations, Malaysian Technical Universities Conference on Engineering and Technologies (MUCET) 2013, 3-4 Dec 2013, Universiti Malaysia Pahang.

3) M. S. Mohamad and **M. Izham**, Lattice kinetic scheme with virtual flux method for incompressible flow with complex geometry simulation,Seminar Kebangsaan Aplikasi Sains dan Matematik 2013,29-30 Oct 2013, Universiti Tun Hussein Onn Malaysia.

4) **M. Izham**, T. Fukui and K. Morinishi, A comparative study of regularized lattice Boltzmann method and entropic lattice Boltzmann method for high Reynolds number flow, Proceedings of Asian Symposium on Computational Heat Transfer and Fluid Flow 2011 (ASCHT11), Kyoto University, 22-26 Sep 2011, paper no. 091

5) **M. Izham**, T. Fukui and K. Morinishi, Regularized lattice Boltzmann method with virtual flux method for incompressible flow simulations, 24^{th} Computational Fluid Mechanics Symposium, Keio University, 20-22 Dec 2010, E6-4