Curriculum Vitae

NAME: Debarshi Patanjali Ghoshal
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CURRENT POSITION: Pursuing PhD (since Fall, 2014) in the Department of Electrical and Computer Engineering at McGill University, under the supervision of Prof. Hannah Michalska.

PAST RESEARCH EXPERIENCE:

1. M.Tech thesis at Department of Electrical Engineering, Indian Institute of Technology Kanpur:
   Robot Learning from a Human Expert through Modified Kinesthetic Teaching
   SUPERVISOR: Dr. Laxmidhar Behera
   (Professor, Department of Electrical Engineering, IITK.)
2. Summer Internship at Indian Institute of Science, Bangalore:
   Waypoint Navigation system for Unmanned Aerial Vehicles (UAV)
   SUPERVISOR: Dr. Seetharama M. Bhat
   (Chairman, Department of Aerospace Engineering, IISc.)
3. Research Project:
   Neural network approach for automatic number plate recognition (ANPR)
   SUPERVISOR: Dr. Anjan Rakshit
   (Professor, Department of Electrical Engineering, Jadavpur University.)
4. Research Project:
   Robust Controller Design for Boiler Burning Process using RBode Plot
   SUPERVISOR: Dr. Smita Sadhu
   (Professor, Department of Electrical Engineering, Jadavpur University.)
5. Final-year Elective Project at Department of Electrical Engineering, Jadavpur University:
   Internal Model Control

PUBLICATIONS:

1. **Debarshi Patanjali Ghoshal**, Hannah Michalska. ***Double-Sided Kernel Observer for Linear Time-Varying Systems***. Accepted in IEEE Conference on Control Technology and Applications (CCTA 2017)
2. **Debarshi Patanjali Ghoshal**, Kumar Gopalakrishnan, Hannah Michalska. ***Kernel-Based Adaptive Multiple Model Target Tracking***. Accepted in IEEE Conference on Control Technology and Applications (CCTA 2017)
3. **Debarshi Patanjali Ghoshal**, Kumar Gopalakrishnan, Hannah Michalska. ***Algebraic Parameter Estimation Using Kernel Representation of Linear Systems***. Accepted in The 20th World Congress of the International Federation of Automatic Control (IFAC 2017)
4. **Debarshi Patanjali Ghoshal**, Kumar Gopalakrishnan, Hannah Michalska. ***Using Invariance to Extract Signal from Noise***. Accepted in The 2017 American Control Conference (ACC 2017)
5. **Debarshi Patanjali Ghoshal**, Niladri Das, Samrat Dutta, Laxmidhar Behera. ***Robot Learns from Human Teacher Through Modified Kinesthetic Teaching***. International conference on Advances in Control and Optimization of Dynamic Systems (ACODS 2014)
6. **Debarshi Patanjali Ghoshal**, Sudeshna Das Gupta. ***Robust Controller Design for Boiler Burning Process Using RBode Plot***. International Journal of Electrical, Electronics and Computer Engineering 1(2): 11-14(2012). ISSN No. (Online) : 2277-2626

7. Ankush Roy, **Debarshi Patanjali Ghoshal**. ***Number Plate Recognition for Use in Different Countries Using an Improved Segmentation***. IEEE Technically Sponsored National Conference on Emerging Trends and Applications in Computer Science (NCETACS-2011)
   [Awarded Best-Paper of the Conference]

EXPERIENCE AS REVIEWER:

1. Acted as a reviewer for **Computer Science & Electronic Engineering Conference (CEEC 2015)**
2. Acted as a reviewer for **International conference on Advances in Control and Optimization of Dynamic Systems (ACODS 2014)**

TEACHING EXPERIENCE:

Teaching Assistant at Electrical Engineering Department, Indian Institute of Technology Kanpur.
Intelligent Informatics Lab (Fall 2012)
Control System Analysis (Spring 2013)
Basics of Modern Control Systems (Fall 2013)
Control System Analysis (Spring 2014)

EDUCATIONAL QUALIFICATIONS:

Year	Degree	Institution (Board)	CGPA/ %
Ongoing	PhD (Electrical Engg.)	McGill University	4/4
2014	Masters Degree (Electrical Engg.)	Indian Institute of Technology Kanpur	8.42/10
2011	Bachelors Degree (Electrical Engg.)	Jadavpur University, Kolkata	8.11/10 [First Class Honours]
2007	12^{th} Standard	Patha-Bhavan (WBCHSE)	84.80%
2005	10^{th} Standard	Patha-Bhavan (WBBSE)	88.13%

RELEVANT COURSEWORK:

Subject	Level	Grade Point
Engineering Mechanics	Bachelors	9 (out of 10)
Programmable Logic & Sequential Systems	Bachelors	8 (out of 10)
Control System Engineering	Bachelors	8 (out of 10)
Numerical Analysis & Computer Programming	Bachelors	9 (out of 10)
Computer and Control Engineering	Bachelors	10 (out of 10)
Advanced Control Theory	Bachelors	10 (out of 10)
Basics of Modern Control Systems	Masters	10 (out of 10)
Intelligent System and Control	Masters	10 (out of 10)
Mathematical Structures of Signals & Systems	Masters	10 (out of 10)
Introduction to Robotics	Masters	10 (out of 10)
Mathematical Foundations of Systems	PhD	4 (out of 4)
Linear Systems	PhD	4 (out of 4)
Introduction to Robotics	PhD	4 (out of 4)

COMPUTER SKILLS: Matlab, Julia, C, Python, LaTeX, Microsoft Word, PowerPoint, Excel