Abhishek Aich

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RESEARCH INTERESTS

Computer Vision, Machine Learning, and Sparse Signal Optimization.

EDUCATION

University of California, Riverside, CA, USA

- Ph.D. in Electrical and Computer Engineering — Sep 2018 – Present
  - Adviser: Dr. Amit K. Roy-Chowdhury | Co-adviser: Dr. M. Salman Asif
  - GPA: 3.90 / 4.00

National Institute of Technology, Tiruchirappalli, Tamil Nadu, India

- M.S. in Electronics and Communication Engineering — 2016 – 2018
  - Thesis: Exploiting Sparsity for Direction of Arrival Estimation Algorithms in Linear Array
  - Adviser: Dr. P. Palanisamy
  - GPA: 8.80 / 10.00

Biju Patnaik University of Technology, Rourkela, Odisha, India

- B.Tech. in Electronics and Communication Engineering — 2011 – 2015
  - Thesis: Target Tracking using Parametric Spectral Estimation Methods
  - GPA: 9.02 / 10.00

EXPERIENCE

Graduate Student Researcher — Sep 2018 – Present

- University of California, Riverside — CA, USA
  - Group: Video Computing Group
  - Supervisors: Dr. Amit K. Roy-Chowdhury and Dr. Salman Asif
  - Focus: Computer Vision and Machine Learning.

Research Scholar — Feb 2016 – Apr 2018

- National Institute of Technology, Tiruchirappalli — Tamil Nadu, India
  - Group: Signal and Image Processing Lab.
  - Supervisor: Dr. P. Palanisamy
  - Focus: Array signal processing, compressive sensing.

Teaching Assistant — Jan 2018 – Apr 2018

- National Institute of Technology, Tiruchirappalli — Tamil Nadu, India
  - Graduate Course: Digital Signal and Image Processing Lab. (EC610)
  - Supervisor: Dr. P. Palanisamy

Research Assistant — May 2014 – Aug 2015

- Silicon Institute of Technology, Bhubaneswar — Odisha, India
  - Supervisor: Prof. Utpal K. Dash
  - Focus: Array signal processing.

SELECTED PUBLICATIONS

[1] Abhishek. Aich, and P. Palanisamy, "A strict bound for dimension of measurement matrix for CS beamformer MUSIC algorithm," in *IEEE Region 10 Conference (TENCON)*, Singapore, pp. 2602-2605, 2016.

[2] Abhishek. Aich, and P. Palanisamy, "A novel CS beamformer root-MUSIC algorithm and its subspace deviation analysis," in *IEEE Region 10 Conference (TENCON)*, Penang, Malaysia, pp. 1404-1408, 2017.

[3] Abhishek. Aich, and P. Palanisamy, "On application of OMP and CoSaMP algorithms for DOA estimation problem," in *IEEE International Conference on Communication and Signal Processing (ICCSP)*, Chennai, India, 2017.

AWARDS & SCHOLARSHIPS

- **Deans Distinguished Fellowship Award**, University of California, Riverside — 2018 – Present
- **MHRD Scholarship**, Govt. of India — 2016 – 2018
- **Scholar's Club**, Silicon Institute of Technology, Bhubaneswar — 2012 – 2015
  - For being in the Top 3 of the Electrical and Communication Engineering Department
- **e-Medhabruti Scholarship**, Govt. of Odisha — 2012 – 2015

TECHNICAL SKILLS

- **Programming Skills**: MATLAB , Python
- **Operating System**: Windows, Macintosh, Linux
- **Others**: LaTeX, MS Office

GRADUATE COURSES

• Advanced Computer Vision • Pattern Recognition • Information Theory • Convex Optimization • State and Parameter Estimation Theory • Stochastic Processes • Sparsity, Structure, and Inference • Math. Methods for EE • Adv. Digital Signal Processing

PROFESSIONAL ACTIVITIES

Conference Reviewer:
IEEE TENCON 2016, IEEE TENCON 2017
Journal Reviewer:
IEEE Transactions on Signal Processing 2018, Taylor & Francis International Journal of Electronics Letters, IET Signal Processing