Abhishek Aich

♥ WCH 371, University of California Riverside, CA 92521, USA aaich@ece.ucr.edu • ★ • 🛅 • 🖸

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 Tamil Nadu, India

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

Teaching Assistant

Jan 2018 – Apr 2018 Tamil Nadu, India

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

Research Assistant

May 2014 – Aug 2015

Odisha. India

2012 - 2015

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

SELECTED PUBLICATIONS

- [1] <u>Abhishek. Aich</u>, 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] <u>Abhishek. Aich</u>, 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] <u>Abhishek. Aich</u>, 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
 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 • 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