# Pawan Raghav Poojary

#### Personal Data

HOMEPAGE: https://sites.google.com/view/pawanpoojary

Address: Department of Electrical Engineering,

Robert R. McCormick School of Engineering, Northwestern University, Evanston, IL.

PHONE: +1 773 739 4071

EMAIL: pawanpoojary2018@u.northwestern.edu, pawan.poojary@gmail.com

#### EDUCATION

September 2018 - Present Doctor of Philosophy, Electrical Engineering

CGPA: 3.59/4.0

Advisor: Dr. Randall Berry,

Northwestern University, Evanston, IL.

July 2015 - August 2018 Master of Science, Electrical Engineering

Thesis: "Caching policies under content freshness constraints"

CGPA: 8.63 Advisors:

Dr. Krishna Jagannathan,

Indian Institute of Technology Madras, Chennai, India.

Dr. Sharayu Moharir,

Indian Institute of Technology Bombay, Mumbai, India.

JULY 2010 - MAY 2014 Bachelor of Engineering, Electronics Engineering,

Percentage: 77.33

Vidyalankar Institute Of Technology, Mumbai University, Mumbai, India.

#### Research interests

Stochastic processes, Reinforcement Learning, Game theory, Estimation.

### Publications

- 1. P. Poojary and R. Berry, "Bayesian Observational Learning in Mean-Field Games with Imperfect Observations,"
  - in  $59^{\rm th}$  Annual Allerton Conference on Communication, Control, and Computing, 2023.
- 2. P. Poojary and R. Berry, "Welfare effects of ex-ante bias and tie-breaking rules on Observational Learning with Fake Agents,"
  - in  $21^{\rm st}$  International Symposium on Modeling and Optimization in Mobile, Ad hoc, and Wireless Networks (WiOpt), 2023. (recipient of the "Best Student Paper" Award).
- 3. P. Poojary and R. Berry, "Observational learning with negative externalities,"
  - in IEEE International Symposium on Information Theory (ISIT), 2022.
- 4. P. Poojary and R. Berry, "Observational learning with Fake Agents,"
  - in IEEE International Symposium on Information Theory (ISIT), 2020.
- 5. P. Poojary, S. Moharir, and K. Jagannathan, "A Coupon Collector based approximation for LRU cache hits under Zipf requests,"
  - in 19<sup>th</sup> International Symposium on Modeling and Optimization in Mobile, Ad hoc, and Wireless Networks, (WiOpt) 2021.

- 6. P. Poojary, S. Moharir, and K. Jagannathan, "Caching policies under content freshness constraints",
  - $-10^{\rm th}$  International Conference on Communication Systems and Networks (COMSNETS), 2018. (recipient of the "Best Poster" Award)

#### Course work

Probability theory, Real analysis, Convex optimization, Digital modulation and coding, Wireless and cellular communications, Communication networks, Martingale theory and concentration inequalities, Game theory and Mechanism Design, (Current courses: Stochastic modeling.)

## SUMMER SCHOOLS

- 2016 Attended two-week Advanced Instructional School (AIS) on Optimization conducted by National Centre for Mathematics (NCM) covering the following topics.
  - Convex Optimisation.
  - Integer Programming.
  - Non-linear Programming Algorithms.

#### Professional Experience

- July 2015 to Present Teaching Assistant at IIT Madras for the following courses. The work included delivering few lectures, conducting tutorial classes and doubt-solving sessions, setting up weekly assignments and grading assignments and examinations.
  - EE5110 Probability foundations (computational) Jan 2016
  - EE5110 Probability foundations (measure-theoretic) July 2016, July 2017
  - EE5121 Convex Optimization Jan 2017, Jan 2018
- Reviewed articles for National Conference on Communications (NCC-2018).
- Volunteered for National Conference on Communications (NCC-2017) and Mobile AdHoc Networking and Computing (ACM MobiHoc 2017).
- July 2010 to May 2014:
  - Worked in the Instrumentation Lab and Integrated Electronics Lab at VIT Mumbai for the project titled "ECG and Pulse Oximeter Based Health Monitoring System".
    The project primarily focussed on wirelessly monitoring the cardiac signals and body vitals through a portable device and used arrhythmia and other abnormality detection algorithms to process these signals in real time.
  - Participated in Robotics competitions and technical workshops at Techfest (IIT Bombay) and built remote controlled planes, gliders, hovercrafts and rovers.

Phone: +1 847 491 7074

E-mail: rberry@ece.northwestern.edu

#### References

Dr. Randall Berry,

Professor and Chair, Department of Electrical Engineering, Robert R. McCormick School of Engineering, Northwestern University, Evanston, IL-60208.

## Dr. Krishna Jagannathan,

Assistant Professor, Department of Electrical Engineering, IIT Madras,

Chennai 600036, India.

Dr. Sharayu Moharir,

Assistant Professor, Department of Electrical Engineering, IIT Bombay,

Mumbai 400076, India.

Dr. Radha Krishna Ganti,

Assistant Professor, Department of Electrical Engineering, IIT Madras, Chennai 600036, India.  $\begin{array}{c} {\rm Phone:} \ +91 \ 44 \ 2257\text{-}4469 \\ {\rm E\text{-}mail:} \ krishnaj@ee.iitm.ac.in} \end{array}$ 

 $\begin{array}{c} {\rm Phone:} \ +91\ 22\ 2576\ 7411 \\ {\rm E\text{-}mail:} \ {\rm sharayum@ee.iitb.ac.in} \end{array}$ 

Phone: +91 44 2257-4467 E-mail: rganti@ee.iitm.ac.in