

PROFESSIONAL EXPERIENCE

- CURRENT TELEFONICA R&D, Spain
JUL 2020 *Researcher*
Decentralised network measurements and content delivery through converged edge networks.
Experience gained: cellular measurements & deployments, reinforcement learning, XR content delivery.
- JUN 2020 KING'S COLLEGE LONDON, UK
JUL 2019 *Postdoctoral Research Assistant*
Advanced media delivery for education at the edge of the network.
Experience gained: network orchestration, OpenStack, AR/VR media delivery.
- AUG 2015 GRAM VAANI COMMUNITY MEDIA PVT. LTD., Delhi
JAN 2014 *Member of Technical Staff*
Gained the research experience in the field of Information and Communication Technologies for Development (ICTD).
Experience gained: voice media, telephony services, production level fullstack development.
- DEC 2013 INDIAN INSTITUTE OF TECHNOLOGY, Delhi
AUG 2012 *Research Associate*
Made in-depth analysis and practical study on working of a network protocol stack, in particular, network and transport layers.
Experience gained: Internet measurements, real-world remote deployments

RESEARCH ACTIVITIES

- JUL 2018 QUEEN MARY UNIVERSITY OF LONDON, UK
MAR 2018 *Research Assistant*
Worked on a upload infrastructure through content caching at the edge for realtime user broadcasts.
Experience gained: live broadcasts over Internet, data collection and analysis (Facebook Live).
- FEB 2018 KING'S COLLEGE LONDON, UK
JULY 2016 *Research Assistant*
Modelled a proactive and co-operative content placement scheme to improve content delivery at the edge. Also involved in end-to-end 5G implementation.
Experience gained: incentivisation through energy credits, large scale data analysis (BBC iPlayer, wgle.net) and microservices.
- AUG 2017 CAMBRIDGE COMPUTER LABORATORY, UK
MAR 2017 *Research Assistant*
Formulated a collaborative edge architecture for on-demand content delivery.
Experience gained: edge network architecture, content caching, spatial data visualization.

SELECTED PUBLICATIONS

Measuring Decentralised Web

- **DESIGN AND EVALUATION OF IPFS: A STORAGE LAYER FOR THE DECENTRALIZED WEB**
In 36th ACM Special Interest Group on Data Communication (SIGCOMM), Netherlands, Aug 2022
- **TOXICITY IN THE DECENTRALIZED WEB AND THE POTENTIAL FOR MODEL SHARING**
In ACM Special Interest Group for computer performance evaluation (SIGMETRICS), India, Jun 2022
- **EXPLORING CONTENT MODERATION IN THE DECENTRALISED WEB: THE PLEROMA CASE**
In 17th ACM Conference on emerging Networking EXperiments and Technologies (CoNEXT), Germany, Dec 2021
- **CHALLENGES IN THE DECENTRALISED WEB: THE MASTODON CASE**
In 19th ACM Internet Measurement Conference (IMC), Amsterdam, Netherlands, Oct 2019

Measuring Connectivity/Content delivery architectures for 5G & Beyond

- **A BROWSER-SIDE VIEW OF STARLINK CONNECTIVITY**
In Proceedings of the 22nd ACM Internet Measurement Conference (IMC), Nice, France, Oct 2022
- **GLOBAL MOBILE NETWORK AGGREGATORS: TAXONOMY, ROAMING PERFORMANCE AND OPTIMIZATION**
In 20th ACM Mobile Systems, Applications and Services (Mobisys), Oregon, US, Jun 2022
- **DSM-MOC AS BASELINE: RELIABILITY ASSURANCE VIA REDUNDANT CELLULAR CONNECTIVITY IN CONNECTED CARS**
In IEEE Transactions on Network and Service Management (TNSM), Feb 2022
- **CONSUME LOCAL: TOWARDS CARBON FREE CONTENT DELIVERY**
In 38th IEEE International Conference on Distributed Computing Systems (ICDCS), Austria, July 2018
- **FACEBOOK (A)LIVE? ARE LIVE SOCIAL BROADCASTS REALLY BROADCASTS?**
[Honorable Mention] In 27th World Wide Web Conference (WWW), Lyon, France, Apr 2018
- **FIRST IMPRESSIONS ON THE STATE OF CELLULAR DATA CONNECTIVITY IN INDIA**
In 4th ACM Symposium on Computing and Development (DEV), Jan 2013

Measuring Multi-access Edge Computing

- **A REALITY CHECK ON INFERENCE AT MOBILE NETWORKS EDGE**
In EUROSYS Workshop on Edge Systems, Analytics and Networking (EdgeSys), Mar 2019
- **CARE TO SHARE? AN EMPIRICAL ANALYSIS OF CAPACITY ENHANCEMENT BY SHARING AT THE EDGE**
In MOBICOM Workshop on Technologies for the Wireless Edge (EdgeTech), Nov 2018
- **WI-STITCH: CONTENT DELIVERY IN CONVERGED EDGE NETWORKS**
[Best Paper] In Proceedings of SIGCOMM Workshop on Mobile Edge Communications, Aug 2017
[Invited] ACM SIGCOMM Computer Communication Review (CCR), Oct 2017

EDUCATION

- 2015 - 2019 Masters/Doctorate in COMPUTER SCIENCE
King's College London, Strand, UK
Thesis Advisor: [Prof. Nishanth Sastry](#)
- 2008 - 2012 Bachelor of Technology in INFORMATION TECHNOLOGY 8.43/10
Anna University, Chennai, India

SKILLS

Programming Languages	Python, C/C++, Bash, Java
Data Collection & Analysis	scrapy, scipy, pandas
ML/DL tools & Frameworks	scikit-learn, Tensorflow (beginner)
5G RAN and Core	Open Air Interface, srsRAN, Open5GS
Modelling & Optimization	SCIP, MATLAB
Cloud Services	AWS, Azure
Web Frameworks	Django (Python), Laravel (PHP)

AWARDS AND ACHIEVEMENTS

- 2022 Runners-up - Telefónica Hackathon
- 2015 - 2019 Prof. Sir Rick Trainor Scholarship
- 2018 Travel Grant Award: ICDCS, ACM COMPASS
- 2018 WWW Best Paper Honorable Mention
- 2017 SIGCOMM MECOMM Best Paper Award
- 2017 SIGCOMM Travel Grant Award
- 2014 Winners - YAHOO! Hackathon
- 2012 Best Undergraduate Project Award
- 2010 - 2012 Several winning streaks and runner-up awards in poster presentation and robotic competitions (organised by Microsoft Dreamspark, IIT Madras, IIT Kharagpur, IIT Bombay)
- 2008 - 2010 Cash award during bachelors for outstanding curriculum.

TEACHING

7CCSMNSE	Network Security	2016, 2017
7CCSMOPM	Operations Research and Management	2015

REFERENCES

Provided on Request

October 29, 2022
Barcelona

(Aravindh Raman)