# ABIRA SENGUPTA

web: https://abira-sengupta.github.io

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## A.EDUCATIONAL QUALIFICATION

- 1) Doctoral of Philosophy (PhD) in Information Science (pursuing 2019)
- University of Otago, NZ
- 2) Masters of technology (MTech) in Computer Science (2011 2013)
- GPA: 8.87/10 (West Bengal University of Technology, India)
- 3) Bachelor of Technology (BTech) in Computer Science (2006 2010)
- GP: 7.43/10 (West Bengal University of Technology, India)

## B. RESEARCH EXPERIENCE

- 1) PhD Research at the University of Otago, NZ (Pursuing April 2019 present)
- Research: Multi Agent System.
- Project: Computational theory of collective action (Using Event Calculus).
- Funding: PhD funded by MARSDEN FUND.
- Paper submitted COINE 2021.
- 2) Pre-doctoral Research at the Indian Statistical Institute (2017 to 2018)
- Research: machine learning applied to facial image and pincode detection
- Papers published in conferences (3 in total).

## C. TEACHING EXPERIENCE

- 1) Tutor/Demonstrator at the University of Otago, NZ(2019 to 2021: 3 semesters)
- COMP 101, R and SQL coding to undergraduate class, (2019, 2nd semester)
- INFO 204, machine learning using Python coding to undergraduate class (2020, 2nd semester)
- -INFO 310, contemporary techniques and methodologies for modern software and system development using JAVA (2021, 1st semester)
- 2) Guest Lecturer at Jadavpur University, India (June 2016 to December 2017).
- Taught Multimedia.
- Also set exam questions and graded them.
- 3) Guest Lecturer at Kalayani Government Engineering College, India (January 2016 to December 2018)
- Taught Algorithm, Automata, Graphics and Multimedia.
- Also invigilated and graded exams.
- 4) Guest Lecturer at Aliha University, India (2015)
- Taught Sensor Networking theory.
- Also set exam questions and graded them.
- 5) Guest Lecturer at Narula Institute of Technology, India (August 2013 to December 2016)
- Taught C Programming and Architecture, Multimedia, Networking theory. Also invigilated and graded exams.

#### D. PROFESSIONAL PORTFOLIO

## FUNDING/GRANTS

- 57250NZD: MARSDEN scholarship (2.1 years PhD studies)
- 2964NZD: Pūtea Tautoko Student Relief Fund (1 month Scholarship and Tuition Fees
- 3500NZD: Technical Education Quality Improvement Programme (TEQIP) phase-ii scholarship (for 1.6 years).

## E. REFERENCES

- 1) DR. STEPHEN CRANEFIELD (relation: primary PhD supervisor at Otago)
- Affiliation: Professor, Department of Information Science, University of Otago, NZ.
- Email: stephen.cranefield@otago.ac.nz, phone:

#### F. PUBLICATIONS

#### **CONFERENCE:**

- 1) Abhijit Das, Abira Sengupta, Muhammad Saqib, Umapada Pal, Michael Blumenstein, "More Realistic and Efficient Face-Based Mobile Authentication using CNNs", (IJCNN) 2018:1-8.
- 2) Abhijit Das, Abira Sengupta, Miguel A. Ferrer, Umapada Pal, Michael Blumenstein, "Linking face images captured from the optical phenomenon in the wild for forensic science", (IJCB) 2017: 781-786.
- 3) Nabin Sharma, Abira Sengupta, Rabi Sharma, Umapada Pal, Michael Blumenstein, "Pincode detection using deep CNN for postal automation", (IVCNZ) 2017: 1-6.
- 4) Abira Sengupta, Saurabh Malgaonkar, Nikita Mehrotra, Tejas Hirave, "A Preliminary Investigation of LEACH, TEEN and DEEC Towards Wireless Sensing Application", (ICCICT) 2021 (accepted for oral presentation).

## G. ARXIV PREPRINT

1) Abira Sengupta, Stephen Cranefield, Jeremy Pitt, "Solving social dilemmas by reasoning about expectations," arXiv: 2105.03552, 2021.