

# Raktim Mondol

Permanent Resident • Full-time working rights  
mondol.me  | Sydney, Australia | Mob: +61412936237

## EDUCATION

### UNSW, SYDNEY


#### PHD IN COMPUTER SCIENCE & ENGINEERING (CONTINUING)

Anticipated Completion Date  
Dec 2024

**Project:** Histopathology image and genetic data analysis using AI

### RMIT UNIVERSITY

#### MS BY RESEARCH IN COMPUTER SCIENCE & BIOINFORMATICS

Graduated Dec 2019 | Melbourne, VIC  
Graduated with High Distinction  
 Thesis Summary

## SKILLS

Languages:

R • Python • SQL •  $\LaTeX$

Deep Learning Framework:

Pytorch • Tensorflow

Distributed & Cloud Computing:

AWS • GCP • Galaxy

IDE:

Spyder, Jupyter Notebook, Rstudio

Software:

Stata, SPSS, MATLAB

OS:

Linux • Windows

## AWARDS

- PhD Scholarship at UNSW (2020)
- Master's by Research with High Distinction (2019)
- Master's Scholarship at RMIT (2017)
- Bachelor with High Distinction (2013)

## LINKS

Github:// [raktim-mondol](https://github.com/raktim-mondol)

LinkedIn:// [rmondol](https://www.linkedin.com/in/rmondol)

Researchgate:// [RaktimMondol3](https://www.researchgate.net/profile/Raktim-Mondol)

Twitter:// [@raktimmondol](https://twitter.com/raktimmondol)

Academia:// [RMondol](https://www.academia.edu/profile/rmondol)

## COURSEWORK

### ONLINE

Machine Learning

Deep Learning

R Programming

## SUMMARY & RESEARCH INTERESTS

I am an experienced data scientist and programmer (R & Python), with deep expertise in artificial intelligence (AI), bioinformatics, computer vision (CV), and high-performance computing (HPC). I have a solid research background focused on analyzing large datasets and statistical analysis. I am a dedicated and committed individual with a strong team-oriented spirit, a positive attitude, and exceptional interpersonal skills.

## EXPERIENCE

### CASUAL ACADEMIC | UNSW

July 2021 – Continuing | Sydney, NSW

- Conduct Laboratory and Tutorial Classes

### TEACHING ASSISTANT | RMIT UNIVERSITY

July 2017 – Oct 2019 | Melbourne, VIC

- Conducted Laboratory and Tutorial Classes

## RESEARCH

### BIOMEDICAL IMAGE COMPUTING | DOCTORAL RESEARCHER

March 2021 – Continuing | SYD, NSW

Developing AI model to assist pathologist in breast cancer identification and treatment recommendation.

### NEUROSyd RESEARCH LABORATORY | POSTGRADUATE RESEARCHER

March 2017 – 2019 | SYD, NSW

Worked on developing a deep learning model and bio-informatics pipeline to extract bio-markers from high-dimensional data.

## PUBLISHED JOURNAL

Mondol, R.K.; Millar, E.K.A.; Sowmya, A.; Meijering, E.

**BioFusionNet: Deep Learning-Based Survival Risk Stratification in ER+ Breast Cancer Through Multifeature and Multimodal Data Fusion**, in *IEEE Journal of Biomedical and Health Informatics*, 2024

Code: <https://github.com/raktim-mondol/BioFusionNet>

Mondol, R.K.; Millar, E.K.A.; Graham, P.H.; Browne, L.; Sowmya, A.; Meijering, E.

**hist2RNA: An Efficient Deep Learning Architecture to Predict Gene Expression from Breast Cancer Histopathology Images**, in *Cancers*, 2023

Code: <https://github.com/raktim-mondol/hist2RNA>

Mondol, R.K., N. D. Truong, M. Reza, S. Ippolito, E. Ebrahimie, and O. Kavehei

**AFExNet: An Adversarial Autoencoder for Differentiating Breast Cancer Sub-types and Extracting Biologically Relevant Genes**, in *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 2021

Code: <https://github.com/NeuroSyd/breast-cancer-sub-types>