Dr.-Ing. **Debdas Paul**

Postdoctoral researcher
computer science engineer, Computational biologist

📍 Tübingen, Germany
🏳 Indian
📞 +49 176 217 444 21
in debdas@Linkedin
🌐 debdas@HomePage
○ debdas@Github
@ paul.debdas@gmail.com

RESEARCH EXPERIENCE

06/2020 – present **Postdoctoral researcher**   University Hospital, Tübingen, Germany

- machine and deep learning based integration of single cell flow-cytometry and radiomics data to identify and monitor cancer-immunotherapy responses.
- Multi-modal integration of omics data
- Group leader: `Prof.  Dr.  Manfred Claassen`

`.Python  /  Keras & TensorFlow  /  cuML (GPU for ML)  /  CNN  /  Cross-domain learning`

02/2019 – 05/2020 **Postdoctoral researcher**   The Max Planck Institute for Biophysical Chemistry, Göttingen, Germany

- Contributed to the development of QPuB - a tool that employs Bayesian statistical inference based on Markov chain Monte Carlo (MCMC) sampling to learn the posterior distributions of the conversion factors for the peptide products without further experimentation.
- Group leader: `Dr.  Juliane Liepe`

`R  /  MCMC  /  Bayesian inference  /  Mass spectrometry  /  Immunology`

07/2017 – 10/2017 **Visiting researcher**   Harvard Medical School

- Developed a rule-based modelling approach based on the kappa-language framework for gene regulation.
- Collaborator: `Prof.  Jeremy Gunawardena`

`Python  /  Kappa - a rule-based language  /  stochastic simulation`

11/2014 – 12/2018 **Doctoral researcher**   Institute for Systems Theory and Automatic Control

- explored the origin of robustness and its characterization in biological signaling networks as well as in gene regulation.
- Supervisor: `Prof.  Dr.  rer.  nat.  Nicole Radde`

`MATLAB  /  Systems theory  /  Systems biology  /  Mathematical modeling & Stochastic simulation`

EDUCATION

2014 – 2019 **Dr.-Ing.**   University of Stuttgart, Germany
Systems theory, Systems Biology, Magna cum Laude

2012 – 2014 **Master of Science & Master of Science (Technology)**   KTH, Sweden & Aalto University, Finland
Computational Systems Biology, Distinction

2009 – 2011 **Master of Engineering**   Jadavpur University, India
Computer Science & Engineering, First class

2005 – 2009 **Bachelor of Technology**   West Bengal University of Technology, India
Computer Science & Engineering, First class

KEY PROGRAMMING SKILLS

Python
MATLAB
R

MACHINE LEARNING FRAMEWORK

Tensorflow, Keras, Scikit-learn

HONORS & AWARDS

- **European Union's - Erasmus Mundus Fellowship (EU equivalent of Fullbright)**
- **Bilateral Mobility Grant, Govt. of Republic of Slovenia**

LANGUAGES

· **German** - A1 (Goethe-Zertifikat) · **English** - full working proficiency · **Bengali** - native