

RESEARCH INTERESTS

Computational Biology; Network Representation Learning; Deep Learning

CURRENT POSITION

2017 **Rochester Institute of Technology**, Rochester, NY
Graduate Research Assistant, Golisano College of Computing and Information Science
Advisor: Prof. Anne Haake, Prof. Rui Li

EDUCATION

Rochester Institute of Technology, Rochester, NY

2016 – **Doctor of Philosophy**, Computing and Information Science

Tribhuvan University, Pulchowk Engineering Campus, Lalitpur, Nepal

2011 – 2014 **Bachelor of Engineering (B.E.)**, Computer Engineering (GPA: 4.0)
Institute of Engineering: Pulchowk Campus, Tribhuvan University
Thesis: Agricultural Data Integration and Analysis – Analyzing environmental factors to recommend appropriate crops for a place.

PROFESSIONAL EXPERIENCE

2016 – **Rochester Institute of Technology**, Research Assistant
ABI Innovation - Novel Methodology for Leveraging Metabolic Simulation to Improve Regulatory Reconstruction.
Advisor: Prof. Anne Haake, Prof. Rui Li

2015 – 2016 **Verisk Information Technologies**, Data Engineer
Analyzed US Healthcare (medical and pharmacy claims) to provide insights about people's health.

2014 – 2015 **Yomari Pvt. Ltd.**, Software Trainee
Developed ETL framework to load retail data into data warehouse.

2013 **E&T Nepal Pvt. Ltd.**, Intern
Developed web application that provides user friendly interface to simulate CFD results in 3D models and share among users.

HONORS & AWARDS

2017 RIT Ph.D. Merit Scholarship

2016 Verisk Way to Go Award (Best Employee, Verisk Information Technologies)

2015 Rookie of the Year (Verisk Information Technologies)

2014 The College Fellowship Scholarship (6 times during B.E.)

2014 Academic Excellence Award (8 times during B.E.)

RECENT ACADEMIC PROJECTS

- 2017 **Learning Hidden Representation of Gene Expression Data.**
Analyzed gene expression data to see if they provide clues about the regulatory relationship between genes. Implemented autoencoder architecture to learn hidden representation of expression data. learned representation is visualized with tSNE.
Independent Study (Deep Learning), Spring 2017
- 2017 **Ensemble SVM for Reconstruction of Gene Regulatory Network.**
Developed ensemble feature selection approach based on support vector machines to select the subset of transcription factors (genes) that have huge impact in the expression level of target genes. Implemented multiprocessing to speed up the execution.
Foundations of CyberInfrastructure Foundations, Spring 2017
- 2016 **Predicting the outcome of soccer matches.**
Investigated various features related to soccer match to design a framework to predict the outcome of soccer matches.
Introduction to Big Data, Fall 2016

TALKS AND POSTERS

- 2017 Reconstruction of Gene Regulatory Network using Ensemble SVM with Recursive Feature Elimination
[Poster] GCCIS Research Showcase, Rochester Institute of Technology

TECHNICAL SKILLS

Programming Languages	Python, R, Java, C/C++, MATLAB.
Markup Languages & Web	HTML/5, CSS, Javascript, Java Spark Framework, PHP, Shiny.
Databases & Query Languages	SQL, MySQL, PL/SQL, Oracle.
Other	GitHub, SVN, Scrum Agile Development.