# RANI BASNA

### About Me

Doctor of Mathematical Statistics with a specialty in Machine Learning, with more than 10 years of research and teaching experience. I catch on quickly and I'm very eager to learn. I am self motivated and enjoy overcoming challenges. I do enjoy working with a focused and creative team to meet goals and deadlines. I am delighted to read and interpret science with the purpose of communicating it to the public, management or experts. I spend most of my free time with my two children and my wife I enjoy playing board games and chess. I don't miss the chance to meet friends and do social activities.



2010

2005

2004

2021

Now.

2019

2021

2018

2019

# **EDUCATION**

Doctorate of philosophy in science 2016 Linnaues Univesity

♥ Växjö, Sweden

CONTACT INFO 

Thesis: Mean field games for Jump Processes

**G** Github

M.S. in Mathematical Modeling

Linnaues Univesity

♥ Växjö, Sweden

▼ Twitter: @RaniBasna

Specialize in Mathematical Statistics and Financial Mathematics.

Orcid

ranibasna

Diploma of Postgraduate Studies in Science

Q Latakia, Syria Tishreen University

B.S. in Mathematical Science

Q Latakia, Syria Tishreen University

# SOFTWARE

**TEACHING** 

🌄 Package (mananciais) -Co-Author, maintainer.

# RESEARCH EXPERIENCE

### **Machine Learning Researcher**

Institute of Medicine.

• Gothenburg, Sweden.

GitHub repo for material.

PROGRAMMING

- · Topics: Machine learning, Database developing, Statistical learning, Computational disease phenotype.
- · Bayesian Network, PhD supervisions, Deep Learning for Clustering.

Data Scientist Post-Doctoral.

Department of Internal Medicine and Clinical Nutrition at Institute of Medicine.

· Topics Machine learning, Database developing, Dimensionality reduction, Statistical learning, Computational disease phenotype, Network disease modeling, risk modeling, Advanced method Clustering, Hight performance computing, and missing data imputation modeling.

• Gothenburg, Sweden

Python Docker Docker

**L** tidyverse

SKILLS

R R

Git.

C GitHub

Markdown

DataBase

# PROFESSIONAL EXPERIENCE

# Data scientist

Unumai Danish based company.

🗣 Copenhagen, Denmark

- · User Behaviour predictions.
  - · Recurrent Nueral Network.
  - · Send-time optimization
- · Bayesian Optimization and Bayesian Bandits.

### Data scientist and AI Framework Developer

Company Blackwood Seven.

• Copenhagen, Denmark

- · Methods: Bayesian Statistical Hierarchical Regression Model.
- · Markov Chains Monte Carlo.
- · Marketing Mix Modeling.
- · Non-convex constrained optimization, Sequential Optimization.
- · Stochastic Approximation (Stochastic gradient Descent methods and its variants).
- · Bayesian Optimization, Variational Inference, Proximal operator methods.

I am an active participant in Conferences: I'm was a coorganizer of Linnaeus University Workshop in Stochastic Analysis and Applications, I have talks and presentations in several meetups and workshops.

Experience with Presentations, and scientific writing using Latex.

### Soft Skills

Experienced in Stress management, Active listening and Collaboration.

Experienced in Communications. Adaptability, Teamwork, and Time management.

# Languages

Arabic: Native

**English:** Proficient Swedish: Beginner

# ♣┛ TEACHING EXPERIENCE

# Teacher at University of Gothenburg

· Reproducible research in computational Science.

• Gothenburg, Sweden.

2019-Now

### Teacher assistant at Linnaeus University

· Subjects: Calculus 1, Basic Mathematics, Linear Algebra, Lab sessions for Risk and Portfolio Analysis, Lab sessions for Insurance Mathematics, and Linear Statistical Models.

♥ Växjö, Sweden.

2010 - 2014.

### Teacher assistant at University of Aleppo

· Probability and Statistics, Programing Language, Complex Analysis, Differential Equations.

Aleppo, Syria.

2006 - 2008.

# Teacher assistant at Tishreen University

· Calculus, Probability, Statistics, Mathematical Mechanic.

• Latakia, Syria

2003 - 2006.

2014

2016

# SELECTED PUBLICATIONS

Rani Basna, Astrid Hilbert, Vassili Kolokoltsov. "An Epsilon Nash equilibrium for non-linear Markov games of mean field type on finite state space".

Communications on Stochastic Analysis, (2014) 449-468.pages.

♥ Växjö, Sweden.

Rani Basna, Astrid Hilbert, Vassili Kolokoltsov.

"An Epsilon Nash equilibrium for pure jump Markov games of mean field type on continuous state space".

Stochastics: An International Journal of Probability and Stochastic Processes.

♥ Växjö, Sweden.

Rani Basna, Astrid Hilbert, Vassili Kolokoltsov.