# YAMINI KANDREGULA

+91-7989130584 | kyamini584@gmail.com | linkedin.com/in/yaminik123/ | yaminikandregula.github.io

#### **EDUCATION**

National Institute of Technology Tiruchirappalli

Tamil Nadu, IN

2019 - 2023

Bachelor of Technology, Chemical Engineering | CGPA: 8.59/10

Andhra Pradesh, IN

Sri Chaitanya Junior College
BIEAP Courses: Physics, Chemistry, Maths, English, CGPA: 9.63/10

2017 - 2019

Good Shepherd School

Andhra Pradesh, IN

CICSE PERCENTAGE: 89.93%

2016 - 2017

## EXPERIENCE

Research Intern

May 2021 – Present

Indian Institute of Technology Kanpur

Kanpur, IN

Working on Research Project under the guidance of Dr. Anikesh Pala, on Docking of 6YB7 COVID-19 protease
molecule and various drugs using GROMACS, VMD for Molecular Dynamics simulations and Machine Learning for
filtration of drugs.

Summer Intern May 2021 – Present

Indian Institute of Petroleum And Energy

Visakhapatnam, IN

• Under the guidance of Dr. Venkata Reddy, developing various Machine Learning models for defense against adversarial attacks on Water Distribution Systems

Research Intern

June 2021 – Present

National Institute of Technology Tiruchirappalli

Trichy, IN

• Working on various Research Projects under the guidance of Dr. Sourav Poddar, on topics related to kinetics of Biomass using ASPEN PLUS and MATLAB-SIMULINK software's.

## Online Summer Internship Program

Aug 2020 – Oct 2020

Indian Institute of Chemical Engineering

IN

• A three-month long program focused on Chemical Process Technology, where I learnt about several industrial processes from experts and authored a report on the same.

## RESEARCH PAPERS

Yamini, K., Gearard Deepak., Santhanavijayan, A.(2021). FluidMOnto: Modelling, Evaluation and Visualization of Ontologies for Fluid Mechanics as a Domain of Choice. Manuscript Submitted.

• This paper aims to create and divulge a chemical ontology that may interpret Fluid Mechanics based on its features and propertiesusing Web Protégé RDF model.

Yamini, K., Gearard Deepak., Santhanavijayan, A.(2021). ParticleOnto: Modelling and Visualization of Ontologies for Particle Science as a Domain. Manuscript Submitted.

• This paper attempts a novel approach to model Powder Technology as a domain in Chemical Informatics using XML and Web Protégéin a Semiotic methodology.

## TECHNICAL SKILLS

Languages: Python, Java, JavaScript, HTML/CSS

Frameworks: Web Dev, TensorFlow

Specialization: Machine Learning, Deep Learning

Modeling and Analysis: MATLAB - SIMULINK, Excel VBA, ASPEN PLUS

#### Extracirrcular Activities

- Pursuing Minor in Management from DoMS (Department of Management Studies), NIT Trichy.
- Attended workshop on Deep Learning for Computer Vision, conducted by PROBE, NIT Trichy.
- Attended 7-day Bootcamp on Computer Vision, conducted by SHAPEAI
- Awarded an **NSS Medal** in 2020, for India Book of Records -It was the largest awareness program of NSS (NIT TRICHY) on plastic hazards, which reached the India book of records
- Team Player in NIT Trichy Kho-Kho Girls Team.