YAMINI KANDREGULA

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EDUCATION

National Institute of Technology Tiruchirappalli

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

Tamil Nadu, IN 2019 – 2023

Sri Chaitanya Junior College

BIEAP Courses: Physics, Chemistry, Maths, English, CGPA: 9.63/10

Andhra Pradesh, IN 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 based 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, under the guidance of Dr. Anikesh Pala, Assistant Professor, Department of Mechanical Engineering, Indian Institute of Technology Kanpur.

Summer Intern May 2021 – Present

Indian Institute of Petroleum And Energy

Visakhapatnam, IN

 Developing various Machine Learning models for defense against Adversarial Attacks on Water Distribution Systems, under the guidance of Dr. Venkata Reddy, Assistant Professor, Department of Chemical Engineering, Indian Institute of Petroleum and Energy.

Research Intern

June 2021 – Present

National Institute of Technology Tiruchirappalli

Trichy, IN

 Working on various Research Projects on topics related to kinetics of Biomass using ASPEN PLUS and MATLAB-SIMULINK software's under the assistance of Dr. Sourav Poddar, Post- Doctoral Fellow, National Institute of Technology Tiruchirappalli.

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.