

# JOHN REDDY PEASARI

## MS Bioinformatics and Computational Biology & B.Tech Biotechnology

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## EDUCATION

### Saint Louis University

#### Masters in Bioinformatics and Computational Biology

📅 Aug 2019 – Present

📍 Saint Louis, MO, USA

- Bioinformatics Major GPA: 3.90/4.0
- Graduate Research Assistant
- Graduate Scholarship from BCB department

### Sreenidhi Institute of Science and Technology

#### Bachelors in Biotechnology

📅 Sep 2014 – April 2018

📍 Hyderabad, India

- Undergraduate Researcher
- Biotechnology Major Percentage: 82.00/100
- Best Student of Biotechnology

### Narayana Junior College

#### Mathematics, Physics and Chemistry

📅 April 2012 – May 2014

📍 Hyderabad, India

- MPC Major Percentage: 94.99/100

## EXPERIENCE

### Graduate Research Assistant

#### Dr. Zhenguo Lin Lab

📅 September 2019 – Present

📍 Saint Louis, MO, USA

- Working with Schizosaccharomyces pombe NGS data.

### Scientific Assistant

#### BhaPra Biosolutions

📅 October 2019 – June 2019

📍 CCMB, Hyderabad, India

- Worked in the project titled: Development of Mosquito repellent military uniform impregnated with micro encapsulated formulations through novel pressure plasma technique.
- Synthesized Nano particles and standardization of all the formulations.

### Undergraduate Researcher

#### Department of Biotechnology, India

📅 Sep 2018 – Aug 2019

📍 Hyderabad, India

- Worked as undergraduate researcher in the project titled "Micro algal biomass production in an energy efficient internally illuminated bubble column Photo-bioreactor for bio diesel production".
- Cultivation of Algae and Spirulina for biomass production, lipid enhancement and Phycocyanin extraction..

## LANGUAGES

English  
Telugu  
Hindi



## TECHNICAL SKILLS

Python

C++

Linux

R

Machine learning

Genomics

NGS Analysis

RNA Seq

## PROJECTS

### Homology Modeling and Simulations

- In this study, the target protein sequence was retrieved and 3D theoretical structure was predicted by Homology modeling using MODELLER 9.18.
- Molecular dynamics and simulations for the modeled protein were carried out using the Desmond program, an explicit solvent MD package of Schrödinger Suite.

### Bioethanol from Algae using Grape Pomace

- Sustainable production methods for food and energy are necessary, so cultivation of microalgae can be an important contribution for transition into a more sustainable society.
- Cultivated Algae in grape pomace, extracted lipids and carbohydrates. To decrease negative impact on the environment, fruit waste like grape pomace can be used as one of the alternative sources as a growth medium.

### Astaxanthin extraction from Algae

- This project investigated the production of astaxanthin, a ketacarotenoid as a co-product along with lipids from Chlorella sorokiniana.
- Obtained Lipid profile indicates that the composition and quantity levels of unsaturated fatty acids were found to be much higher than saturated fatty acids and microalgal fatty acid profiles were suitable for biodiesel characterization.

## PUBLICATIONS

- Phytochemical screening and in silico studies of flavonoids from Chlorella pyrenoidosa.
- Chromatographic analysis of phytochemicals in costus igneus and computational studies of flavonoids.
- Simultaneous Production of Astaxanthin and Lipids from Chlorella Sorokiniana in presence of Reactive Oxygen Species- In review.

## OTHER

- President of Technical Association of Biotechnology club.
- Member of World Research Council.
- Awarded Nova Scotia Graduate Scholarship -Dalhousie University.