

# Saurav Kumar Roy

📍 Kolkata, India

✉ roysauravkumar42@gmail.com

☎ +91-9330565549

in Saurav Kumar Roy

🔗 Sauravroy34

## Education

**Amrita Vishwa Vidyapeetham, Amritapuri**

*Sept 2023 – Present*

*B.Tech in Electrical and Computer Engineering*

- GPA: 8.19

## Experience

**Open Source Contributor**

*Remote, June 2024 –*

*SunPy*

*Present*

- Added method to retrieve spacecraft location from NASA's Satellite Situation Center API
- Implemented Solarnet client to fetch data from Solarnet Virtual Observatory
- Resolved bugs and issues

**Open Source Contributor**

*Remote, June 2024 –*

*Stingray*

*Present*

- Replaced numpy.fft with scipy.fft to enhance computation speed of Fast Fourier Transform
- Added method to smooth a light curve
- Improved documentation
- Fixed bugs and issues

## Projects

**JWST Light Curve and Spectral Analysis**

[GitHub](#) 

- Plotted light curves and planet spectra of WASP-39b from JWST NIRSpec data using Astropy and Matplotlib
- Tools Used: Python, Astropy, Matplotlib

**Poet-GPT**

[GitHub](#) 

- Created a poem generation tool using a fine-tuned GPT-2 model with a custom dataset of poems
- Tools Used: Python, PyTorch, Hugging Face Transformers

**Get The Text**

[GitHub](#) 

- Built an LSTM and CTC model using TensorFlow to extract text from images
- Tools Used: Python, TensorFlow

**A Maze**

[GitHub](#) 

- Developed a maze-solving algorithm using reinforcement learning (Q-learning)
- Tools Used: Python, NumPy

## Volunteer Experience

**Clean-Up Drive Participant**

*Vallikavu, Kerala, 2024*

- Participated in a community clean-up drive around Vallikavu, Kerala, to promote environmental sustainability

## Technologies

**Languages:** C++, C, Java, Python, JavaScript

**Technologies:** Git, TensorFlow, PyTorch, Hugging Face Transformers, NumPy, SciPy, Matplotlib, Pandas, Astropy, SunPy