

# Jyotsna J. PATIL

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## RESEARCH INTERESTS

RADIO ASTRONOMY, PULSAR ASTROPHYSICS, , GRAVITATIONAL WAVE ASTROPHYSICS, MULTI-MESSENGER ASTRONOMY

## EDUCATION

AUGUST 2008- JULY 2012	Bachelors of Engineering in <b>CIVIL ENGINEERING</b> Government College of Engineering, Karad, State-Maharashtra, India Percentage-64.24 , CGPA-7.17, USA GPA $\approx$ 3.42
AUGUST 2006- JUNE 2008 :	Higher Secondary M. R. JR. COLLEGE, GADHINGLAJ, STATE-MAHARASHTRA, INDIA Percentage-86.50,

## RESEARCH EXPERIENCE

OCTOBER 2023- August 2024 :	Remote Research Experience - NanoGrav/NANOstars at Oregon State University : <ul style="list-style-type: none"><li>• Pulsar Candidate ranking on Pulsar Science Collaboratory-(60 hours) Known Pulsar -PSRJ1453+1902</li><li>• NANOGrav Spring Meeting 2024</li><li>• Comparison of Sensitivity curves of 3 identical pulsars from NanoGrav and PPTA</li><li>• Solar Wind Delay by using NE_SW values of PPTA</li><li>• Solar Wind Electron Density of PPTA</li></ul> <a href="https://github.com/JyotsnaPatil27/Jyo_code/tree/master/REMOTE%40OSU">https://github.com/JyotsnaPatil27/Jyo_code/tree/master/REMOTE%40OSU</a>
APRIL 2022- May 2022 :	Reading course in Fast Radio Bursts (FRBs) : <ul style="list-style-type: none"><li>• Online lectures from YouTube and Q and A with Prof. Avinash Deshpande, IUCAA, Pune.</li></ul>
JANUARY 2021- May 2021 :	An Advanced course in Pulsar Astrophysics (IUCAA) : <ul style="list-style-type: none"><li>• Models of Pulsar Magnetosphere.</li></ul> Research Problems-.1] Obtain Pulsar emission profile from X-ray events data. 2] Characterize sub-pulse drifting in pulsar radio data.
AUGUST 2018- MARCH 2019 :	Vela Pulsar observation with the Ooty Radio Telescope : One-second data files • Dynamic spectrum • dedispersion • Pulsar Period with Prof. Avinash Deshpande (ex-RRI, Bangalore)
MAY 2017- JULY 2017 :	Reading course in Pulsar Astrophysics : <ul style="list-style-type: none"><li>• Basic pulsar properties • Millisecond Pulsars (MSP)</li><li>• Pulsar timing etc. with Prof. Bhaswati Bhattacharya, NCRA, Pune.</li></ul>

## CURRICULUM

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APRIL 2016- June 2018 :	Learned Physics and Astrophysics with Prof. C.H. Ishwara Chandra, NCRA, Pune, India
JULY 2015- March 2016 :	Attended lectures of M. Sc. First Year at SP Pune University, Physics Department, Pune, India

## DISTINCTION

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TOEFL iBT-MyBest SCORES : 81/120 (R-18, L-20, S-21, W-22)

duolingo english test : overall-120/160 (S-105, W-120, R-135, L-110)

JEST 2017(iPhD)- 24.67/100 (Qualification marks-29)

## WORK EXPERIENCE

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SEPTEMBER 2024- present :	Senior Associate Innodata India Pvt. Ltd., Noida, U.P., India.
MARCH 2020- November 2020 :	Subject Matter Expert in Physics with Chegg India Pvt. Ltd, Delhi, India.
MAY 2013- October 2014 :	Junior Engineer at B.G. Shirke Construction Technology Pvt. Ltd, Pune, India.

## COMPUTER SKILLS

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PROGRAMMING LANGUAGES :	Python, <del>TeX</del>
PLATFORMS :	Windows, Linux
TOOLS :	MS-Office, Libre-Office, Google Co-lab, Jupyter
PACKAGES :	Numpy, Scipy, Matplotlib, Scikit-learn, Pandas, Seaborn, Astropy
PTA ANALYSIS :	PINT, Hasasia, ENTERPRISE

## PROGRAMMING LANGUAGES

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Python ● ● ● ○ ○

## EXTRA-CURRICULAR ACTIVITIES

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BHARATANATYAM-4 YEARS,  
PHOTOGRAPHY, STAR-GAZING, DRAWING AND PAINTING

## REFERENCES

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