

# Ajay Tiwari

Post-doc,  
Machine learning  
in Space Weather

- October 29, 2020
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- [ajaynnld13@gmail.com](mailto:ajaynnld13@gmail.com)
- Cis-Indian-Male(he/him)

## Social Network

- @ajeytiwari
- Github
- Ajay Tiwari

## Languages

- English ● ● ● ● ●
- Hindi ● ● ● ● ●

## Hard Skills

- Programming ● ● ● ● ●
  - Python, IDL, MATLAB, Fortran
- Machine Learning
  - NLP, Feature engineering, Regression analysis
- Data Visualisation

## Soft Skills

- Leadership
  - Leading a collaboration spread across various countries
- Communication

## Working Experience

- currently **Postdoc** Researcher  
Machine learning in space weather
- 2017 – 2020 **Post Graduate Researcher** Northumbria University  
Doctoral thesis on the waves in the solar corona
- 2017 – 2019 **Demonstrator II** Northumbria University  
Taught first year undergraduate mathematics .

## Education

### Research Experience

- 2020 – 2010 **Post-Doc Panda Studies** Panda Academy  
In-depth studies on the impact of bamboo nutrition for young pandas and its relation to relaxing, sleeping and snoozing parts of the day.
- 2018 **Visiting Researcher** KU Leuven  
On simulating the damping of propagating kink waves in solar corona.
- 2008 – 2009 **Research Stay Europe** European Panda Labs  
Spending one year abroad teaching european panda facilities about the newest findings and research in the field of asian rice hat covers and applications for bamboo as a material.

### Study

- 2011 – 2016 **BS-MS** IISER Pune  
Focus: Magnetohydrodynamic waves in the solar atmosphere.
- 2016 **MS Theses ( $\emptyset 1, 0$ )** IIA, Bangalore  
Studying the MHD waves in the solar corona and as a part of my thesis detected first imaging observations of standing slow wave in coronal fan loops.

## Publications

- 2019 **Damping of Propagating Kink Waves in the Solar Corona**  
*Ajay K Tiwari, Richard J Morton, Stéphane Régnier, James A McLaughlin*  
The Astrophysical Journal
- 2017 **First imaging observation of standing slow wave in coronal fan loops**  
*Vaibhav Pant, Ajay Tiwari, D Yuan, Dipankar Banerjee*  
The Astrophysical Journal Letters

## Awards

- 2010 – now Panda of the Year Panda World Forum
- 2005 – now Face of World Wide Fund for Nature WWF
- 2000 Winner of Bamboo Sprouts Eating Contest Bamboo Society

## Extra-Curricular Activities

- Relaxing Master the fine art of relaxing everywhere
- Music Playing the bamboo flute in the 1st Panda Orchestra
- Education Teaching young pandas to be more panda-like

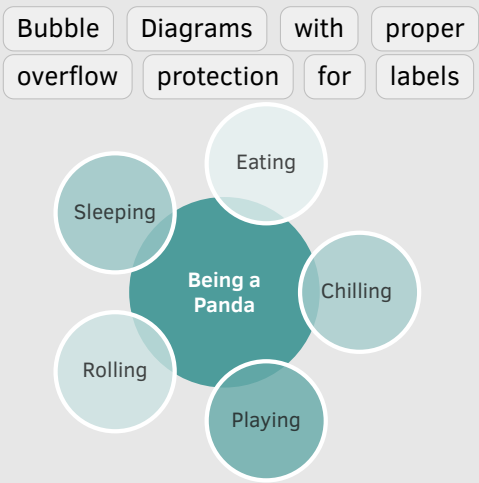
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## About Me

A data aficionado by heart. I am interested in anything related to data and data analysis. As a self-proclaimed biologist by heart and a space physicist by profession I look for opportunities to learn and transfer methods from one field to the other.

## Diagrams



## Barskills

Wearing asian rice hats

Playing Chess

Playing the bamboo flute

## Memberships

Royal Astronomical Society

EUropean Astronomical Society

## Computational Skills

|            |   |
|------------|---|
| Techniques | Machine learning, Image processing, Computer vision, Bayesian statistics, Time series analysis                |
| Packages   | pandas, statsmodels, emcee, Numpy, Astropy, Tensorflow, Gaussian mixture models, Pytorch, matplotlib, seaborn |
| Tools      | python , $\LaTeX$ , OpenOffice, Unix, Linux, Microsoft Office   |
| Courses    | Computational Physics, Scientific Computing   |
| Others     | IDL, Matlab, Fortran, HTML5   |

## Conferences

Subsection

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### cvitem

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