

# Anil Goyal

Research Scientist at NEC Laboratories

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Nationality: Indian

Age: 27

## Work Experience

- Oct, 2018–present **Research Scientist**, *NEC Laboratories Europe*, Heidelberg, Germany.  
Data Science Application Group
- Nov, 2015–Oct, 2018 **Doctoral Researcher**, *LIG, Grenoble and LaHC, Saint-Etienne*, France,  
**Supervisors:** Prof. Massih-Reza Amini and Dr. Emilie Morvant.  
**Subject:** Two-Step Hierarchical Multiview Learning using PAC-Bayesian and Boosting based approaches. This project is funded by Rhône-Alpes Region.
- Aug–Oct, 2015 **Data Science Engineer**, *Cube26 Private Limited*, New Delhi, India.  
Worked on News Aggregation, News Ad-Banner and News Categorization for the Neon News Android Application.
- Feb–Jun, 2015 **Research Intern**, *Laboratoire d'Informatique de Grenoble (LIG)*, Grenoble, France.  
○ **Masters Thesis** at AMA team, LIG, Grenoble under the guidance of Prof. Massih-Reza Amini.  
○ Worked on Transferring knowledge from a labeled source collection to learn IR functions on an unlabeled target collection
- May–Aug, 2014 **Software Developer**, *Pyramid Cyber Security & Forensics Private Limited*, New Delhi, India.  
Cheque Fraud Detection for Punjab National Bank, India using JAVA and MATLAB.
- May–Jul, 2013 **Research Intern**, *University of Hyderabad*, Hyderabad, India.  
○ Worked on finding the number of clusters in short text documents under the guidance of Prof. Arun K. Pujari.  
○ Ncut-term weighing scheme and spectral clustering using MATLAB.
- May–Jul, 2012 **Developer Intern**, *Institute of Nuclear Medicine & Allied Sciences (INMAS), DRDO*, Delhi, India.  
Designing and developing Leave Management System and Document Dispatch System using PHP, MySQL, HTML and CSS.

## Education

- 2015–2018 **Ph.D. in Machine Learning**, *Université de Lyon*, Lyon, France.  
**Subject:** Two-Step Hierarchical Multiview Learning using PAC-Bayesian and Boosting based approaches. This project is funded by Rhône-Alpes Region.
- 2014–2015 **Masters of Science in Informatics (MOSIG)**, *ENSIMAG, Grenoble INP*, Grenoble, France, (*with honors*).  
Subjects: Machine Learning, Information Access and Retrieval, Computer Vision, Advanced Human-Computer Interaction, Computational Geometry and Medical Imaging, Simulation & Robotics.
- 2010–2014 **Bachelor of Technology**, *The LNMIIT*, Jaipur, India, *CGPA – 8.69/10*.  
Specialization: Computer Science and Engineering

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## Research Activities

- Project Member of **ANR LIVES** Project (Learning with Interacting Views). (Jan, 2016-September, 2018)
- Advising **Soroush Seifi**, SUBJECT:“A PAC-BAYESIAN MULTIVIEW STUDY”, Laboratoire Hubert Curien, CNRS, Saint-Etienne, France (Apr–Jun,2016).  
Co-advised with Prof. Amaury Habrard and Dr. Emilie Morvant
- ML Conferences IDA 2018 (Presentation and Poster), CAp 2018 (Presentation and Poster), ECIR 2018 (Volunteer), CAp 2017 (Presentation and Poster), CAp 2016 (Presentation and Poster), NCVPRIPG 2013 (Presentation)
- Workshops Deep Learning Workshop 2017, Computational and Statistical Trade-offs in Learning 2016
- Teaching Assistance **Database Management Course**, The LNMIIT, Jaipur, India (Jan-May,2012 & Jan-May,2013).  
Co-advised with Prof. Subrat K. Dash

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## Skills

- Programming Python, C, JAVA, MATLAB
- Tools Terrier IR Platform
- Web Development HTML, CSS, PHP, JavaScript, JSP, D3.js
- Databases MySQL, Oracle
- Language English: fluent / French: intermediate / Hindi: native speaker

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## Positions of Responsibility

- ECIR 2018 Volunteer in European Conference on Information Retrieval, Grenoble, France, 2018.
- Aug,2013-Apr,2014 Vice-Chairperson, IEEE Student Chapter at LNMIIT, Jaipur.
- May,2012-May,2013 Sub-coordinator of the CYBROS club (Web Development) at LNMIIT, Jaipur.
- May,2011-May,2012 Senator in university Gymkhana at LNMIIT, Jaipur.
- May,2011-May,2012 Senator In-charge of COSHA (The committee of Students for Hostel Affairs) at LNMIIT, Jaipur.
- May,2011-May,2012 Member of the AC-HMC (Academic Council of Hall Management Committee) at LNMIIT, Jaipur.

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## Achievements

- 2013 Google AdCamp, Hyderabad, India.
- 2007 President Scout Award in National Scout and Guide Activity, India.

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## Publications

### Articles in Peer-Reviewed International Conferences

- 2018 **Anil Goyal**, Emilie Morvant, Massih-Reza Amini, “Multiview Learning of Weighted Majority Vote by Bregman Divergence Minimization”, Intelligent Data Analysis (IDA), 's-Hertogenbosch, the Netherlands. (CORE Rank: A)

- 2017 **Anil Goyal**, Emilie Morvant, Pascal Germain, Massih-Reza Amini, “PAC-Bayesian Analysis for a two-step Hierarchical Multiview Learning Approach”, European Conference on Machine Learning & Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD), Skopje, Macedonia (CORE Rank: A)

### Articles in Peer-Reviewed National Conferences

- 2018 **Anil Goyal**, Emilie Morvant, Massih-Reza Amini, “Learning a Hierarchical Majority Vote for Multiview Learning”, French Conference on Machine Learning (CAp), France.
- 2017 **Anil Goyal**, Emilie Morvant, Pascal Germain, “Expected PAC-Bayesian Theorem and its extension to Multiview Learning”, French Conference on Machine Learning (CAp), France.
- 2016 **Anil Goyal**, Emilie Morvant, Pascal Germain, Massih-Reza Amini, “PAC-Bayesian Theorems for Multiview Learning”, French Conference on Machine Learning (CAp), France.
- 2015 **Anil Goyal**, Georgios Balikas, Parantapa Goswami, Massih-Reza Amini, Eric Gaussier, “Transfer Learning for IR Model Parameter Tuning”, French Conference on Machine Learning (CAp), France.
- 2013 **Anil Goyal**, Mukesh K Jadon, Arun K Pujari, “Spectral Approach to find Number of Clusters of Short-text Documents”, IEEE NCVPRIPG, India.

### Research Reports

- 2018 **Anil Goyal**, Emilie Morvant, Pascal Germain, Massih-Reza Amini, “Multiview Boosting by Controlling the Diversity and the Accuracy of View-specific Voters”, Submitted to Neurocomputing Journal

### Ph.D. Thesis

- 2018 **Anil Goyal**, “Learning a Multiview Weighted Majority Vote Classifier: Using PAC-Bayesian Theory and Boosting”, Université de Lyon.

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## References

**Prof. Massih-Reza Amini**  
Professor,  
Université Grenoble Alpes, Grenoble,  
France  
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alpes.fr

**Dr. Emilie Morvant**  
Assistant Professor,  
Université Jean Monnet,  
Saint-Etienne, France  
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**Dr. Pascal Germain**  
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