

Koninika Pal

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Education

- Sept. 2018 - present **Postdoctoral Research Fellow**, *Department D5, Databases and Information Systems, Max Planck Institut Informatik, Saarbrücken, Germany.*
- Mar. 2014 - Sept. 2018 **PhD in Computer Science**, *TU Kaiserslautern (Jan. 2015 - Sept. 2018), Saarland University (Mar. 2014 - Dec. 2014), Germany.*
Thesis: Mining and Querying Ranked Entities.
Adviser: Prof. Dr. -Ing. Sebastian Michel
- Apr. 2013 - Mar. 2014 **Preparatory Phase in Graduate School of Computer Science**, *Saarland University, Saarbrücken, Germany.*
- Jul. 2010 - Jun. 2012 **M.Tech in Information Technology**, *National Institute of Technology (NIT), Durgapur, India, CGPA: 9.48/10.*
Thesis: Synchronization and QoS issues in Real Time Multimedia Communication in IP Network.
Adviser: Dr. Animesh Dutta
- Jul. 2005 - Jun. 2009 **B.Tech in Computer Science and Engineering**, *West Bengal University of Technology (WBUT), Kolkata, India, CGPA: 8.53/10.*
Thesis : ELIXIR COMPLETE REFERENCE TO CLINICAL DIAGNOSIS - A software designed on Database Management System

Research Interests

- Quantitative Question Answering
- Knowledge Base Curation
- Mining Semantically Meaningful Rankings
- Querying, Indexing, and Performance Study for Similarity Search

Research Experience

- Sept. 2018 - present **Postdoctoral fellow**, *MPII, Saarland Informatic Campus, Germany.*
- QSearch: Understanding and extracting quantity from natural language text and building a Question Answering system to handle quantity query.
 - Quasimodo: Extracting common sense assertion in form of SPO triples and canonicalize predicates for extracted SPO
- Mar. 2014 - Aug. 2018 **Research Assistant**, *TU Kaiserslautern and MMCI, Saarland University.*
- Pantheon: Mining and exploring semantically meaningful rankings from web
 - Efficient similarity search over ranked lists using locality sensitive hashing
- Jun. 2012 - Dec. 2012 **Research Fellow (SPO)**, *Indian Institute of Technology, Kharagpur, India.*
- Developing virtual sensor network for adapting feasibility assessment model in coal gasification technology

Teaching Experiences

- SS-2015, SS-2017 **Teaching Assistant**, *Course: Information retrieval and Data Mining.*
TU Kaiserslautern, Germany
- WS 2016/17, WS 2017/18 **Organizer**, *Seminar: Recent Developments in Databases and Information Systems.*
TU Kaiserslautern, Germany
- WS 2015/16 **Organizer**, *Project: Information System (Building Meta Search Engine for Document Retrieval), TU Kaiserslautern, Germany.*

- Jan-July, 2016 **Supervisor**, *Masters Thesis: Mining Feasible Description for a Set of Entities*, Arghavan Hosseinzadeh da Silva, TU Kaiserslautern, Germany.
- August, 2017 - April, 2018 **Supervisor**, *Masters Thesis topic: Annotating Web Tables by exploiting relations among table columns*, Michael Hohenstein, TU Kaiserslautern, Germany.
- Nov, 2017 - May, 2018 **Supervisor**, *Guided Research topic: Making sense of the distribution of ranking criteria*, Gajendra Doniparthi, TU Kaiserslautern, Germany.

Publications

- February, 2020 **Entities with Quantities: Extraction, Search, and Ranking**, Vinh Thinh Ho, Koninika Pal, Niko Kleer, Klaus Berberich and Gerhard Weikum, Accepted in The 13th ACM International Conference on Web Search and Data Mining (WSDM), Houston, USA.
- January, 2020 **Co-Clustering Triples from Open Information Extraction**, Koninika Pal, Vinh Thinh Ho, and Gerhard Weikum, Accepted in The ACM India Joint International Conference on Data Sciences and Management of Data (CoDS-COMAD), Hyderabad, India.
- October, 2019 **Qsearch: Answering Quantity Queries from Text**, Vinh Thinh Ho, Yusra Ibrahim, Koninika Pal, Klaus Berberich and Gerhard Weikum, The 18th International Semantic Web Conference on Scientific and Statistical (ISWC), Auckland, New Zealand.
- November, 2019 **Commonsense Properties from Query Logs and Question Answering Forums**, Julien Romero, Simon Razniewski, Koninika Pal, Jeff Z. Pan, Archit Sakhdeo and Gerhard Weikum, The 30th International Conference on Information and Knowledge Management (CIKM), Beijing, China.
- July, 2018 **Learning Interesting Attributes for Automated Data Categorization**, Koninika Pal and Sebastian Michel, The 30th International Conference on Scientific and Statistical Database Management (SSDBM), Bolzano-Bozen, Italy.
- May, 2017 **LSH-Based Probabilistic Pruning of Inverted Indices for Sets and Ranked Lists**, Koninika Pal and Sebastian Michel, The 20th International workshop on the Web and Databases (WebDB) co-located with ACM SIGMOD 2017, Chicago, USA.
- Sept, 2016 **Exploring Databases via Reverse Engineering Ranking Queries with PALEO**, Kiril Panev, Sebastian Michel, Evica Milchevski, Koninika Pal, PVLDB 9(13), India. Invited Poster and Demo in BTW 2017, Stuttgart, Germany
- July, 2016 **Efficient Similarity Search across Top-k Lists under the Kendall's Tau Distance**, Koninika Pal and Sebastian Michel, The 28th International Conference on Scientific and Statistical Database Management (SSDBM), Budapest, Hungary.
- March, 2016 **A Data Mining Approach to Choosing Categorical Attributes for Ranked Lists**, Koninika Pal and Sebastian Michel, The 19th International Conference on Extending Database Technology (EDBT, Poster), Bordeaux, France.
- 2016 **Mining Entity Rankings**, Fabian Reinartz, Koninika Pal and Sebastian Michel, Datenbankspektrum, Vol. 16(1), pp 27-38, Germany.
- June, 2014 **An LSH Index for Computing Kendall's Tau over Top-k Lists**, Koninika Pal and Sebastian Michel, The 17th International workshop on the Web and Databases (WebDB) co-located with ACM SIGMOD 2014, Utah, USA.
- 2012 **Multipoint Multimedia Synchronization: A Petri Net Based Approach**, Animesh Dutta and Koninika Pal, INFOCOMP Journal of Computer Science vol. 11(2).
- Sept, 2011 **A Petri Nets Based Model for Multipoint Synchronization in Multimedia conferencing**, Koninika Pal, Prajna Devi Upadhyay and Animesh Dutta, SUComS 2011, Hualien, Taiwan.
- Jan, 2011 **A Petri Nets Based Model for Multipoint Synchronization in Audio Conferencing**, Koninika Pal, Prajna Devi Upadhyay and Animesh Dutta, COMSNET 2011, Bangalore, India.

Technical Skills

Programming JAVA, SQL, C, C++, PYTHON

Awards and Activities

- o MHRD Scholarship for Masters Program in India.

- Two years Postdoctoral scholarship from Max Planck Society.
- Research Visit and talk in Maya Ramanath's group in Indian Institute of Technology, Delhi, India, September, 2016
- Selected for 1st ACM Europe Summer School on Data Science, Athens, Greece, July, 2017

Personal Information

Date of Birth November 10, 1987
Nationality Indian
Languages Bengali (Native), English(C1), German(A2)

References

On request.