Poonam Kumari

poonamku@buffalo.edu | 716.604.4787 | Github:Poonam-Kumari

EDUCATION

UNIVERSITY AT BUFFALO PhD in Computer Science
Expected July 2021 | Buffalo, NY

UNIVERSITY AT BUFFALO MS in Computer Science
June 2018 | Buffalo, NY

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE MS in Software Systems
December 2013 | Rajasthan, India

PUBLICATIONS

| Loki: Streamlining Integration and Enrichment
2020 | HILDA, Portland, OR
William Spoth, Poonam Kumari, Oliver Kennedy and Fatemeh Nargesian
This work is the first step towards building and re-using repositories of domain-specific data integration pipelines. We propose a system which consists of repository of datasets and mapping functions and relates new datasets to datasets it already knows about, helping a data scientist to quickly locate and re-use mapping functions she developed for other datasets in the past.

| Make Informed Decisions: Understanding Query Results from Incomplete Databases
2019 | PhD Workshop at VLDB, Los Angeles, CA
Poonam Kumari
This paper focuses on the problem of visualizing uncertainty in incomplete databases and provides an overview of the research conducted till now as part of my PhD thesis.

| Building a Knowledgebase for Incremental Schema Recovery
2018 | Manuscript
Poonam Kumari, Gourab Mitra and Oliver Kennedy
In this work, we focus on the problem of unlabeled or poorly labeled datatsets. Initial research was conducted to develop a new tool which would make it easier to label the data and preserve it later.

| The Good and Bad Data
2018 | North East Database Day at MIT, Boston, MA
Poonam Kumari and Oliver Kennedy
In this work, we conducted informal interviews with users (e.g., News reporters) to understand their iterative data cleaning process and associated challenges. The findings of this work led to the work titled "Building a Knowledgebase for Incremental Schema Recovery".

| Communicating Data Quality in On Demand Curation
2016 | Proceedings of the 11th VLDB Workshop on Quality in Databases, New Delhi, India
Poonam Kumari, Oliver Kennedy, and Said Achmiz
Errorneous data can be queried using On-demand data curation tools which answer with guesses or approximations. In this work, we focus on the problem of communicating these guesses/approximations to the user. With the help of a user study we evaluate the expressiveness and cognitive burden of four representations of "attribute-level" uncertainity. Results of the study are incorporated in on demand curation tool called Mimir.

TECHNICAL SKILLS

Python, SQL, JavaScript, Latex

EXPERIENCE

TESCO HINDUSTAN SERVICE CENTER | Functional Analyst
September 2013 – August 2015 | Bangalore, Karnataka, India

- Impact assess bank changes and take them through to delivery
- Resolved incidents impacting customers

- Worked towards improving the services provided to customers

TESCO HINDUSTAN SERVICE CENTER | Sᴇɴɪᴏʀ Sᴏғᴛᴡᴀʀᴇ Eɴɢɪɴᴇᴇʀ
August 2010 – August 2013 | Bangalore, Karnataka, India
- Developed .Net and SQL related applications
- Resolved day-to-day issues and found root causes for permanent solutions
- Developed tools to ease routine activities

RESEARCH

UB ODIN LAB | Rᴇsᴇᴀʀᴄʜ Assɪsᴛᴀɴᴛ
August 2015 – Present | Buffalo, NY
- Conduct interviews with data analyst/users to understand the pain points in data management cycle.
- Formulate research problems based on interviews.
- Collect data through Institutional Review Board (IRB) approved user studies on Amazon Mechanical Turk.
- Use statistical tests to analyze the data and incorporate the feedback/results in existing data curation tools.

AWARDS

2015   Dean's Fellowship, University of Buffalo
2014   Tesco Star of the moment, Tesco HSC, Bangalore
2012   Tesco Value Award, Tesco, HSC, Bangalore