

Poonam Kumari

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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 datasets. 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

Erroneous 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" uncertainty. Results of the study are incorporated in on demand curation tool called [Mimir](#).

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 | SENIOR SOFTWARE ENGINEER

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 | RESEARCH ASSISTANT

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