

Protiva Rahman

<http://cse.osu.edu/~rahman.92/> | protiva.rahman@vumc.org

EDUCATION

The Ohio State University, Columbus, Ohio

Ph.D. in Computer Science and Engineering, 2020

B.S. in Computer and Information Science, Minor in Mathematics, *cum laude*, 2015

RESEARCH AND TEACHING EXPERIENCE

Vanderbilt University Medical Center, Biomedical Informatics

Postdoctoral Research Fellow (*September 2020–present*), **PI**: Dr. Daniel Fabbri

- Extracting Unstructured Data from Electronic Health Records and Biomedical Literature

National Library of Medicine, National Center for Biotechnology Information

Scientific Visitor (*May 2019 - August 2019*), **PI**: Dr. Zhiyong Lu

- User Evaluation of Biomedical Literature Retrieval

The Ohio State University, Computer Science and Engineering

Graduate Research Associate (August 2015 – August 2020), **PI**: Drs. Arnab Nandi and Courtney Hebert

- Amplifying Domain Expertise in Medical Data Pipelines

The Ohio State University, Computer Science and Engineering

Grader for Introduction to Programming in Java (*January 2013–April 2013*)

- Held office hours and graded homework assignments and lab projects for 45 students

PUBLICATIONS

1. **Protiva Rahman**, Arnab Nandi, Courtney Hebert. Amplifying Domain Expertise in Medical Data Pipelines. *JMIR Medical Informatics* 2020.
2. **Protiva Rahman**, Lilong Jiang, Arnab Nandi. Evaluating Interactive Data Systems: Survey and Case Studies. *The VLDB Journal* 2020.
3. **Protiva Rahman**, Arnab Nandi. TRANSFORMER: A Database-Driven Approach to Generating Forms for Constrained Interaction. *Proc. of the 24th International Conference on Intelligent User Interfaces 2019 (acceptance rate: 25%)*.
4. **Protiva Rahman**, Courtney Hebert, Arnab Nandi. ICARUS: Minimizing Human Effort in Iterative Data Completion. *Proc. of the VLDB Endowment* 2018 (acceptance rate: 17%).
5. **Protiva Rahman**, Jian Chen, Courtney Hebert, et al. Exploratory Visualizations of Rules for Validation of Expert Decisions. *3rd Workshop on Data Systems for Interactive Analysis, Proceedings of the IEEE Visualization Conference 2018*.
6. Courtney Hebert, Yuan Gao, **Protiva Rahman**, Courtney Dewart, Mark Lustberg, Preeti Pancholi, Kurt Stevenson, Nirav Shah, Erinn M Hade. Prediction of antibiotic susceptibility for urinary tract infection in a hospital setting. *Antimicrobial Agents and Chemotherapy* 2020.
7. Courtney Dewart, Yuan Gao, **Protiva Rahman**, et al. Penicillin Allergy and Association with Ciprofloxacin Coverage in Community-onset Urinary Tract Infection. *Journal of Infection Control & Hospital Epidemiology* 2018.

CONFERENCE PRESENTATIONS

1. **Protiva Rahman**, Daniel Fabbri. Automatic Data Curation from Unstructured Text. *AMIA 2021*.
2. **Protiva Rahman**, Michele LeNoue-Newton, Sandip Chaugai, et al. Clinical and genomic predictors of brain metastases (BM) in non-small cell lung cancer (NSCLC): An AACR Project GENIE analysis. *ASCO 2021*.
3. **Protiva Rahman**, Erinn Hade, Emily Patterson, Courtney Hebert. Amplifying Domain Expertise in Antimicrobial Data Pipeline. *AMIA Oral Presentation 2020*.

4. **Protiva Rahman**, Elisabeth Root, Susan D. Moffatt-Bruce, Courtney Hebert. Designing an Interface for a Hospital Geographic Information System. *AMIA 2020*.
5. **Protiva Rahman**, Erinn Hade, Courtney Dewart et al. Predicting Empiric Antibiotic Coverage based on Patient Factors. *AMIA 2019*.
6. **Protiva Rahman**, Courtney Hebert, Arnab Nandi. Enabling Effective Data Interaction for Domain Experts. *IEEE ICHI PhD Symposium 2018*.
7. **Protiva Rahman**, Erinn Hade, Arnab Nandi et al. Derivation of Expert Consensus Rules for Missing Antimicrobial Susceptibility Data. *AMIA 2018*.
8. Lilong Jiang, **Protiva Rahman**, Arnab Nandi. Evaluating Interactive Data Systems: Workloads, Metrics, and Guidelines. *SIGMOD 2018 Tutorial*.
9. **Protiva Rahman**, Courtney Hebert, Albert Lai. Parsing Complex Microbiology Data for Secondary Use. *AMIA 2016*.

PATENT APPLICATIONS

- Rewriting Forms for Constrained Interaction. USPTO: 15/855,515

INVITED TALKS

- Vanderbilt University, “Superheroes for Superbugs”, Feb 2020.
- UC Berkeley, “Amplifying Domain Expertise to Combat Antimicrobial Resistance”, Jan 2020.
- University of Southern California. “Amplifying Domain Expertise in Data Pipelines”, May 2019.

INDUSTRY EXPERIENCE

Nationwide Financial, NFIT Reporting and Data Services

Application Developer Intern (*May 2014-August 2014*)

- Developed SQL reports and Informatica mappings for NF sales

Dahbashi Engineering UAE

Engineering Intern (*August 2010 - September 2010*)

- Improved company’s Oracle management information system

AWARDS

- SIGMOD Student Travel Award (*2018*)
- IEEE ICHI Doctoral Consortium Student Travel Award (*2018*)
- OSU WEGC Outstanding Council Member (*2018*)
- Marianna Russell Technology Grant (*2017*)
- CRA-W Grad Cohort (*2017*)
- Data Quality in the Era of Big Data Workshop Travel Fellowship (*2016*)
- ACM-W Grace Hopper Travel Scholarship (*2016*)

LEADERSHIP AND SERVICE

- PC Member: EDML 2019, co-located with Siam International Conference on Data Mining
- Reviewer: ACM CHI 2020, AMIA 2019, ACM TODS 2019
- AMIA Conference First Look Student Panel 2020
- IUI Conference Student Volunteer 2019
- Women in Engineering Graduate Council, *Member:2017, SWE Rep:2018, VP:2019*
- A Kid Again, *Awareness Chair (2012 – 2014)*
- International Student Organization, *Secretary (2012 – 2013)*
- Phi Beta Kappa
- National Residence Hall Honorary

ADDITIONAL WORK EXPERIENCE

The Ohio State University Housing, Barrett Complex

Resident Manager (*August 2014-April 2015*)

- Managed a 24-hour desk which served the residents and guests of a 350-person residence
- Hired, trained, and supervised a staff of 17 student employees
- Conducted staff meetings with a focus on professional development and diversity and inclusion

The Ohio State University Housing, Morrill Tower

Resident Advisor (*September 2012-April 2014*)

- Held proactive conversations with residents to assist with their academic needs and concerns
- Organized programs to build a safe, fun and close-knit community for 69 residents

Le Meridien Dubai, UAE

Sales and Marketing Intern (*May 2013 – June 2013*)

- Interacted with magazine editors to build media relations
- Persuaded clients to increase business with the hotel during sales calls

SKILLS

- Java, C++, C, Python, SQL, HTML, Javascript, CSS, Object Oriented Programming
- Fluent in English, Bengali, Hindi and intermediate knowledge of French