Nikolaus Nova Parulian
School of Information Sciences
University of Illinois at Urbana-Champaign
501 E. Daniel Street, Room 112
Champaign, IL 61820-6211
https://nikolausn.github.ionnp2@illinois.edu

Expected Graduation Date: July 2023

Professional Interests	Research in the areas of data quality and provenance on data science application, natural language processing, information extraction.
Education	Ph.D. Candidate, Information Sciences Fall 2018 - Now, University of Illinois at Urbana Champaign (Expected Graduation: July 2023) M.S. Information Management Fall 2016 - Fall 2017, University of Illinois at Urbana Champaign B.E. Informatics Engineering 2006, Telkom University, Indonesia
Employment History	
2016 - Now	Graduate Research Assistant at School of Information Sciences UIUC
	 Center of Informatics Research in Science and Scholarship (CIRSS) Supervised by: Dr. Bertram Ludaescher Hathi Trust Research Center (HTRC): https://wiki.htrc.illinois.edu Supervised by: Dr. J. Stephen Downie Social Computing Lab: https://jdiesnerlab.ischool.illinois.edu Supervised by: Dr. Jana Diesner Blender Lab (Natural Language Processing): https://blender.cs.illinois.edu Supervised by: Dr. Heng Ji
2019 - 2022	John Deere, Champaign, Illinois Robotics Student Intern at John Deere Technology and Innovation Center
	 Main Responsibilities: Data warehouse administration and development for data analytics workflow. Research and Development for sensor fusion systems for Autonomous Vehicles. Working with computer vision (image processing) for object/obstacle detection systems. Research and Design for the Internet of Things (IoT) technology, sensors, messaging protocol, and AWS cloud infrastructure.
Publications	Data Curation, Transparent Data Cleaning and Provenance
	Parulian, N. N., & Ludäscher, B. (2022). Conceptual Model and Framework for Collaborative Data Cleaning. In <i>International Digital Curation Conference 2022</i> .
	Parulian, N. N., & Ludäscher, B. (2022, June). DCM explorer: a tool to support transparent data cleaning through provenance exploration. In <i>Proceedings of the 14th International Workshop on the Theory and Practice of Provenance</i> (pp. 1-6).
	Parulian, N. N., Li, L., & Ludäscher, B. (2021). or2yw: Modeling and Visualizing OpenRefine Histories as YesWorkflow Diagrams.
	Parulian, N. N., McPhillips, T. M., & Ludäscher, B. (2020). A Model and System for Querying Provenance from Data Cleaning Workflows. In <i>Provenance and Annotation of Data and Processes</i> (pp. 183-197). Springer, Cham.
	McPhillips, T., Li, L., Parulian, N., & Ludäscher, B. (2019). Modeling provenance and

understanding reproducibility for openrefine data cleaning workflows. In 11th International Workshop on Theory and Practice of Provenance (TaPP 2019).

Digital Libraries, Digital Humanities

Parulian, N. N., Dubnicek, R., Worthey, G., Downie, J.S. (2022). Uncovering Black Fantastic: Piloting A Word Feature Analysis and Machine Learning Approach for Genre Classification. In *Proceedings of the Association for Information Science and Technology*.

Parulian, N. N., Worthey, G., & Downie, J. S. (2022, February). An Ensemble Framework for Dynamic Character Relationship Sentiment in Fiction. In *International Conference on Information* (pp. 414-424). Springer, Cham.

Parulian, N. N., & Worthey, G. (2021). Identifying Creative Content at the Page Level in the HathiTrust Digital Library Using Machine Learning Methods on Text and Image Features. In *Diversity, Divergence, Dialogue: 16th International Conference, iConference 2021, Beijing, China, March 17–31, 2021, Proceedings, Part I 16* (pp. 478-489). Springer International Publishing.

Natural Language Processing, Knowledge Information Extraction

Wang, Q., Li, M., Wang, X., Parulian, N., Han, G., Ma, J., ... & Onyshkevych, B. (2021, June). COVID-19 Literature Knowledge Graph Construction and Drug Repurposing Report Generation. In *Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies: Demonstrations* (pp. 66-77).

Huang, L., Cao, S., Parulian, N., Ji, H., & Wang, L. (2021, June). Efficient Attentions for Long Document Summarization. In *Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies* (pp. 1419-1436).

Network Analysis

Dinh, L., & Parulian, N. (2020). COVID-19 pandemic and information diffusion analysis on Twitter. *Proceedings of the Association for Information Science and Technology*, *57*(1), e252.

Parulian, N. N., Lu, T., Mishra, S., Avram, M., & Diesner, J. (2020). Effectiveness of the Execution and Prevention of Metric-Based Adversarial Attacks on Social Network Data. *Information*, 11(6), 306.

Avram, M. V., Mishra, S., Parulian, N. N., & Diesner, J. (2019, August). Adversarial perturbations to manipulate the perception of power and influence in networks. In *2019 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)* (pp. 986-994). IEEE.

Others

Dinh, L., Sarol, J., Cheng, Y. Y., Hsiao, T. K., Parulian, N., & Schneider, J. (2019). Systematic examination of pre-and post-retraction citations. *Proceedings of the Association for Information Science and Technology*, *56*(1), 390-394.

Cheng, Y. Y., Parulian, N., Hsiao, T. K., Dinh, L., Sarol, J., & Schneider, J. (2019). ReTracker: actively and automatically matching retraction metadata in Zotero. *Proceedings of the Association for Information Science and Technology*, 56(1), 372-376.

	Dinh, L., Cheng, YY., & Parulian, N. (2019). ReTracker: an Open-Source Plugin for Automated and Standardized Tracking of Retracted Scholarly Publications. 2019 ACM/IEEE Joint Conference on Digital Libraries (JCDL), 406–407. Arlitsch, K., Wheeler, J., Pham, M. T. N., & Parulian, N. N. (2020). An analysis of use and performance data aggregated from 35 institutional repositories. Online Information Review.
Presentation and Poster	 Artificial Intelligence for Cultural Organisation (AEOLIAN) workshops (November 2022): https://www.aeolian-network.net/events/workshop-5/ Digital Humanities (DH) 2022 (July 2022): Uncovering the Black Fantastic: Piloting Text Similarity Methods for Finding "Lost" Genre Fiction in HathiTrust Digital Humanities (DH) 2020 (July 2020): Evaluating a Machine Learning Approach to Identifying Expressive Content at Page Level in HathiTrust Coalition for Networked Information (CNI) Fall 2019 Meeting (December 2019): Visualizing Use and Performance Data from a Global Cross-platform Set of Institutional Repositories
Teaching Assistant	 Fall 2018: Data Cleaning, Theory and Practice for Information Sciences (IS537) Summer 2019, 2021, 2022: Data Cleaning, Theory and Practice (CS513) course for Computer Science (Coursera) online course.
Synergetic Activities	 2020, COVID-19 Literature Surveillance Team (COVID-19 LST), Technology Coordinator, https://www.covid19lst.org. Providing crowdsourcing mechanism for literature survey, critics, and evidence mining for COVID-19 literature-related papers/publications/articles. 2020, Association of Computing Machinery for Woman (ACM-W), Technology Administrator, https://acmw.illinois.edu. 2019, Awardee of LIS Education and Data Science for the National Digital Platform (LEADS-4-NDP) Program by Drexel University, Philadelphia, USA. Fall 2018, Summer 2019, Summer 2021, Teaching Assistant for Data Cleaning, Theory and Practice course (IS537 and CS513).