# Nilanjana Das

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### **Education**

Ph.D. in Computer Science

2023-Present

University of Maryland, Baltimore County

Maryland, USA

• Advisor: Dr. Manas Gaur

• GPA: 3.8/4.0

**Master of Science in Computer Science** 

2021-Present

University of Maryland, Baltimore County

Maryland, USA

· Advisor: Dr. Anupam Joshi

• GPA: 3.8/4.0

**Bachelor of Technology in Information Technology** 

2015-2019

Kalinga Institute of Industrial Technology

Bhubaneswar, India

• CGPA · 8 79/10 0

### **Technical Skills**

Operating Systems and Clouds: macOS, Linux, Windows, Microsoft Azure, AWS

Machine Learning and NLP: Clustering, Classification, Regression, Large Language Models

Programming and Databases: C, C++, R, Java, PL/SQL, Python, MySQL, Oracle, MongoDB

Web Development and Libraries: HTML, CSS, JSP, JavaScript, Springboot, JQuery, Pandas, OpenCV

**Web Development and Libraries:** HTML, CSS, JSP, JavaScript, Springboot, JQuery, Pandas, OpenCV **Tools and Techniques**: PyCharm, Eclipse, Visual Studio, Git, GitHub, Wireshark, Snort, Docker, Protégé

## **Research Experience**

#### **University of Maryland, Baltimore County**

Baltimore, MD

Graduate Student Researcher

August 2023 - Present

*Knowledge-infused AI and Inference Lab( KAI<sup>2</sup>)* 

Advisor: Dr. Manas Gaur

Project: Situation-Driven Contextual Adversarial Prompt Attack on Large Language Models.

#### **University of Maryland, Baltimore County**

Baltimore, MD

Graduate Research Assistant

June 2022 - May 2023

UMBC Ebiquity Lab

Advisor: Dr. Anupam Joshi

*Project:* Change Management using Generative Modeling on Digital Twins

# **Teaching Experience**

#### **University of Maryland, Baltimore County**

Baltimore, MD

Graduate Teaching Assistant

January 2024 - May 2024

CMSC 426 Principles of Computer Security

Supervisors: Dr. David Freet and Professor RJ Joyce

#### University of Maryland, Baltimore County

Baltimore, MD

Graduate Teaching Assistant

August 2023 - December 2023

CMSC 441 Design and Analysis of Algorithms

Supervisors: Dr. Adam Bargteil and Dr. Paul Burkhardt

#### **University of Maryland, Baltimore County**

Baltimore, MD

Graduate Teaching Assistant CMSC 441 Design and Analysis of Algorithms

Supervisor: Dr. Christopher Marron

August 2021 - May 2022

# **Professional Experience**

#### **Tata Consultancy Services Limited**

Kolkata, India

Assistant System Engineer

August 2019 – July 2021

- Strengthened technical skills in PL/SQL, HTML, JAVA, AJAX, JSP, and JavaScript to develop code and solve 3–4 defects per day promptly and efficiently.
- Proficient in using TCS MasterCraft<sup>TM</sup> DevPlus, a tool for Scrum management.

#### **Aricent Technologies (Holdings) Limited**

Gurugram, India

Software Engineer Trainee

February 2019 – July 2019

- Developed proficiency in writing test cases in Selenium and solved 100+ SonarQube issues during this internship.
- Coded solutions to defects from Jira and played a key role in contributing to agile project management.
- Did excessive code refactoring and drastically reduced the complexity of the existing code.

### **Publications**

Das, Nilanjana, et al. "Change management using generative modeling on digital twins." 2023 IEEE International Conference on Intelligence and Security Informatics (ISI). IEEE, 2023.

Kotal, Anantaa, Nilanjana Das, and Anupam Joshi. "Knowledge Infusion in Privacy Preserving Data Generation." *KDD Workshop on Knowledge-infused Learning*, 29TH ACM SIGKDD, 2023.

Das, Nilanjana, Santwana Sagnika, and Bhabani Shankar Prasad Mishra. "Role of Machine Learning in Big Data." *Applications of Machine Learning in Big-Data Analytics and Cloud Computing*. River Publishers, 2022. 139-163.

Sagnika, Santwana, et al. "Analytical Review on Techniques and Challenges in Sentiment Analysis." *Empirical Research for Futuristic E-Commerce Systems: Foundations and Applications* (2022): 131-158.

Das, Nilanjana, and Santwana Sagnika. "A subjectivity detection-based approach to sentiment analysis." *Machine Learning and Information Processing: Proceedings of ICMLIP 2019.* Springer Singapore, 2020.

# **Conference Presentations**

Presented the paper "Change management using generative modeling on digital twins." at IEEE International Conference on Intelligence and Security Informatics (ISI) 2023 held in Charlotte, North Carolina, USA.

Presented the paper "A subjectivity detection-based approach to sentiment analysis." at Machine Learning and Information Processing: Proceedings of ICMLIP 2019 held in Pune, India.

### **Awards**

Awarded Graduate Teaching Assistantship with 100% tuition fee waiver, health insurance, and stipend during the first year of M.S. program at the University of Maryland, Baltimore County. (August 2021 - May 2022)

Awarded Graduate Research Assistantship with 100% tuition fee waiver, health insurance, and stipend during the second year of M.S. program at the University of Maryland, Baltimore County. (June 2022 - May 2023)