

# Sirazum Munira Tisha

Assistant Professor

Department of Mathematics and Computer Science

Rollins College, Winter Park, Florida

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## Professional Preparation

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Louisiana State University, Baton Rouge, LA	Computer Science	Ph.D., May 2023
Louisiana State University, Baton Rouge, LA	Computer Science	M.Sc., December 2019
Rajshahi University of Engineering & Technology, Bangladesh	Computer Science & Engineering	B.Sc.(Engg.), December 2014

## Appointments

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Assistant Professor	Rollins College	Aug 14, 2023 - Present
Graduate Teaching Assistant (Instructor in Practice)	Louisiana State University	Jan 01, 2023 - May 19, 2023
Graduate Research Assistant	Louisiana State University	May 15, 2020 - Dec 31, 2022
Graduate Extern	McKinley Senior High School, Baton Rouge, LA	Sep 03, 2019 - May 22, 2020
Graduate Teaching Assistant	Louisiana State University	Aug 15, 2017 - May 22, 2019
Graduate Research Assistant	Louisiana State University	Aug 15, 2016 - Aug 14, 2017

## Experiences

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- Instructing different Computer Science related courses to undergraduate level.
- Developed an automated grading system using machine learning for high school level CS-for-all course named Introduction to Computational Thinking (ICT). This research is funded by Louisiana Department of Education and NSF CS-for-all grants.
- Served as an Instructor and coordinator for three summer terms local high school teacher training program to prepare themselves to teach ICT course.
- Served as team leader for developing video games in a graduate level course project
- Served as a teaching assistant for courses like Computer Graphics, Video game design, Programming with C/C++, Statistics and Graphs in MATLAB, Computer Science with C++ (labs), Computer Science II majors(labs).
- Developed a multi-modal fusion system by fusing Kinect depth sensor and Thermal camera for 3D human body shape estimation as masters' theses research work.
- Taught AP Computer Science Principles in a local high school.

## Technical Strengths

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- **Languages Proficient:** Python, Java, C++, SQL, Shell Scripting, Prior Experience: C, C#
- **Machine Learning:** WEKA, Scikit-learn (Python)
- **Additional Python Libraries/Math and Stats:** Pandas, NumPy, Pygment, Seaborn, TensorFlow, PyTorch, SciPy, OpenCV, Matplotlib, MATLAB
- **GPU Programming:** NVIDIA CUDA
- **Computer Graphics:** OpenGL, WebGL, Unity, Blender, MeshLab, Meshmixer, InVesalius
- **Web:** XML, JavaScript, HTML, PHP
- **SDLC/Documentation:** LaTeX, Overleaf
- **Platforms/ Frameworks:** Windows, UNIX/Linux •
- **Others:** Git

## Publications

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- **S. Tisha, R. Oregon, G. Baumgartner, F. Alegre, J. Moreno, An Automatic Grading System for a High School-level Computational Thinking Course**, Software Engineering Education for the Next Generation (SEENG@ICSE), 2022
- Tisha, Sirazum Munira, **Thermal-Kinect Fusion Scanning System for Body shape Inpainting and Estimation under Clothing** (2019). *LSU Master's Theses*. 5018.  
[https://digitalcommons.lsu.edu/gradschool\\_theses/5018](https://digitalcommons.lsu.edu/gradschool_theses/5018)

## Scholarships, Awards, Training, and Involvements

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- **Research grants:**
  - SEC Emerging Scholars 2022
    - Received \$3000 grant. Funded 5 undergraduate students for preparing data for autograder project.
- **Scholar:**
  - SEC Emerging Scholars Career Preparation Workshop, 2022
  - Anita B. Org Grace Hopper Celebration, 2018
- **Travel grants:**
  - SEC Emerging Scholars Travel grant, 2022
  - Sweden-Bangladesh travel grant, 2017
- **Awards:**
  - EECS meritorious award, 2022 Spring EECS Graduate Student Research Symposium at LSU, poster presentation segment.
  - Student of the year award, undergraduate level, 2014
  - Finalist, 3 Minute Thesis Competition, Louisiana State University 2022

- **Review/Judging:**
  - Judge, Louisiana State University Graduate Research Conference, 2023 (Oral and Poster)
  - Judge, 2023 Region VII Science & Engineering Fair (High school Senior Division)
  - Reviewer, poster section, ACM SIGCSE 2023 conference
  - Judge, LSU Discover Undergraduate Research Program 2022
  - Reviewer, poster section, ACM SIGCSE 2024 conference
- **Teaching related course:** “Motivating Learners, Introduction to Learning Mindsets”
- **Training:**
  - Ethics Competency training for Rollins college Faculty 2024
  - Inclusive STEM Teaching Course
  - Improv and Comedy Theatre Teacher Training 2023
- **Cultural Coordinator:** Bangladeshi Student Association at LSU (BSA@LSU), 2017-2018
- **Member:** IEEE, ACM, Women in Computer Science (WICS@LSU), Women in Machine Learning (WiML)
- **Volunteer:**
  - Student Volunteer, Automated Software Engineering (ASE) 2021 conference