

Avah Banerjee

CONTACT INFORMATION	Department of Computer Science, MS&T Rolla, MO 65401 WEBSITE: www.avahbanerjee.com	573-341-4585 banerjeeav@mst.edu
RESEARCH INTERESTS	Theory and Algorithms, Quantum Information Science, Combinatorics	
EDUCATION	George Mason University , Fairfax, VA Ph.D., Computer Science, Summer 2018 <ul style="list-style-type: none">• Dissertation: <i>Problems On Sorting, Sets and Graphs</i>• Advisors: Dana Richards, Ph.D M.S. (4.0), Computer Science, Dec 2015 <ul style="list-style-type: none">• Thesis: <i>On Maximal Layers of Random Orders</i>• Advisor: Dana Richards, Ph.D National Institute Of Technology , Durgapur, India B.Tech. (8.54/10.0), Electrical Engineering (with honors), May 2009 <ul style="list-style-type: none">• Project: <i>SMPS Design Using PD Controllers</i>	
REFEREED CONFERENCE PUBLICATIONS	<ol style="list-style-type: none">1. Banerjee, I., Richards, D., & Shinkar, I., Sorting On Restricted Topologies, International Conference on Current Trends in Theory and Practice of Informatics (SOFSEM 2019).2. Banerjee, I., & Richards, D. New Results On Routing Via Matchings On Graphs. International Symposium on Fundamentals of Computation Theory (FCT 2017)3. Banerjee, I., & Richards, D. Sorting Under Forbidden Comparisons. Scandinavian Symposium And Workshop On Algorithms (SWAT 2016)4. Banerjee, I., & Richards, D. Computing Maximal Layers of Points in $E^{f(n)}$, Theoretical Informatics - 12th Latin American Symposium (LATIN 2016)	
REFEREED JOURNAL PUBLICATIONS	<ol style="list-style-type: none">5 Banerjee, I., Richards, D., A Sorting Network On Trees, Parallel Processing Letters, 29.4.6 Banerjee, I., & Richards, D. On Distribution Of Maximal Layers Of Random Orders, Congressus Numerantium 225 (2015), 211-216.7 Banerjee, I., & Prasun, D. Group Technology Based Adaptive Cell Formation Using Predator-Prey Genetic Algorithm., Applied Soft Computing 12.1 (2012): 559-572.8 Banerjee, I., & Prasun, D. An Hybrid Detection System Of Control Chart Patterns Using Cascaded SVM And Neural Network Based Detector, Neural Computing and Applications 20.2 (2011): 287-296.	

- AWARDS
- GMU, Volgenau School Of Engineering, Dean's Fellowship 2012–2013
 - GMU, Department Of Computer Science, Outstanding Graduate Teaching Assistant, 2017
 - GMU, Department Of Computer Science, Certificate of Recognition for PhD, 2019
- TEACHING EXPERIENCE
- Instructor
- | | |
|---|-------------|
| MST CS 5001/6001: Intro. to Quantum Computing | Spring 2021 |
| MST CS 6200: Algorithmics II | Fall 2020 |
| LSU MATH 2020: Discrete Mathematics | Spring 2020 |
| LSU CSC 4700: Computational Geometry | Fall 2019 |
| LSU MATH 4172: Combinatorics | Fall 2019 |
- Co-instructor
- | | |
|--|-----------|
| GMU CS 112: Introduction to Computer Programming (using Python)
Under Mark Snyder | Fall 2012 |
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- Teaching Assistant
- | | |
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| I have been a TA for CS583 - Introduction to Algorithms, the primary algorithms course for graduate students. Additionally, I have TA'ed other theory and AI courses (Formal Methods, Intro. To AI etc) along the way. | Spring 2013–17 |
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- INDUSTRIAL EXPERIENCE
- Software Engineer, Videonetics Tech. Pvt. Ltd. Jan 2010 – Mar 2011
- Developed computer vision applications for traffic surveillance
 - Worked on text segmentation and recognition
- Software Engineer, Tech BLA Pvt. Ltd. August 2011 – July 2012
- Designed and developed computer vision based application for mobile devices.
- TALKS
- Presented at 12th Latin American Symposium on Theoretical Informatics.
 - Presented at the inaugural GMU CS PhD Symposium , 2016.
 - Presented at GMU Combinatorics Geometry and Algebra Seminar (CAGS)
 - Presented at Capital Area Theory Seminar (UMD, College Park)
 - I co-organize the CS-Theory colloquium at GMU and given several talks as part of it.
- OTHER
- Languages known: C/C++, Python, Java, Mathematica, Lisp, PROLOG
- REFERENCES
- Dana Richards, PhD
- | | |
|--------------------------------|-----------------------------|
| Associate Professor | Phone: +1 703-993-1545 |
| Department Of Computer Science | E-mail: richards@cs.gmu.edu |
| George Mason University | |
- Guoli Ding, PhD
- | | |
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| Hubert Butts Professor | Phone: +1 225-578-1563 |
| Department Of Mathematics | E-mail: ding@math.lsu.edu |
| Louisiana State University | |
- Fei Li, PhD
- | | |
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| George Mason University | |

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