

# CV of Prakash Ghimire

## 1 GENERAL INFORMATION

### 1.1 Education

- PhD in Mathematics, Auburn University, Auburn, AL , USA, 2016
- Postgraduate diploma (PgDip) in Mathematics, The Abdus Salam International centre for theoretical physics (ICTP), Trieste, Italy, 2010
- M. Sc. in Mathematics, Tribhuvan University, Nepal, 2006

### 1.2 Employment

- Chair, Department of Mathematics and Computer Science, LSUA, 2021-(present)
- Assistant Professor, Louisiana State University at Alexandria, 2016 - (present)
- Graduate Teaching Assistant, Auburn University, 2011 – 2016
- Faculty, Tribhuvan University, Nepal, 2007 – 2009, 2010 – 2011

### 1.3 Major Grants, Awards, and Fellowships

- PI ( LSUA Campus Coordinator) of the ‘Louis Stokes Louisiana Alliance for Minority Participation (LS-LAMP)’ NSF grant , total amount \$75,000, 2022 – 2026.
- Co-PI of the NSF grant titled ‘Supporting Retention and Graduation of Biology, Chemistry, and Mathematics Majors in Rural Central Louisiana’, total amount \$650,000, 2021 – 2026. PI: Dr. Gerard Dumancas, CoPIs: Dr. Guoyi Ke, Dr. Nathan Ponder, Dr. Prakash Ghimire, Dr. Leesia Marshall
- Co-PI of the Louisiana Cybersecurity Talent Initiative Fund titled ‘CENTRAL LOUISIANA INITIATIVE IN CYBER SECURITY (CLICS)’, total amount \$74,300, 2021 – 2022. PI: Dr Tanya Lueder, Co-PIs: Dr. Prakash Ghimire, Dr. Nathan Ponder
- Preparation for Industrial Careers in Mathematical Sciences (PIC Math), total amount \$5,000, 2021 – 2022, Mathematical Association of America/National Science Foundation
- CLIFF E. LABORDE, Sr. Endowed Professorship, total amount \$10,000, 2021 – 2023, Louisiana State University at Alexandria
- Excellence in teaching Award (2015), Auburn University, Department of Mathematics and Statistics
- Emilie Haynsworth Fellowship (2015 ), Auburn University, Department of Mathematics and Statistics

- Emilie Haynsworth Fellowship (2014), Auburn University, Department of Mathematics and Statistics
- Excellence in research Award (2014), Auburn University, Department of Mathematics and Statistics
- ICTP Postgraduate Diploma Award (2010), ICTP, Italy
- Nepal Bidhya bhusan padak 'kha' (2006), Tribhuvan University, Nepal

## 2 Teaching

### 2.1 List of courses taught at LSU

- MATH 4901: Special Topics
- MATH 4200: Abstract Algebra
- MATH 4036: Complex Variables
- MATH 3065:Elementary Differential Equations
- MATH 3040:Fundamentals of Mathematics
- MATH 2057: Calculus-III
- MATH 1552: Calculus-II (online)
- MATH 1550: Calculus-I
- MATH 1431:Calculus with Bus and Econ Applications
- MATH 1022: Plane Trigonometry
- MATH 1021: College Algebra
- MATH 1000: College Algebra Supplement

### 2.2 List of courses developed and taught for LSU online

- MATH 4200: Abstract Algebra
- MATH 4036: Complex Variables
- MATH 2048: Calculus III-B
- MATH 2047: Calculus III-A
- MATH 1543: Calculus II-B
- MATH 1542: Calculus II-A
- MATH 1022: Plane Trigonometry

## 3 Scholarship

### 3.1 Research

My research interests are in Lie algebras, Lie groups, and Matrix theory. Currently, I am working on subalgebras of the Lie algebra of block upper triangular matrices. My dissertation advisor is Dr. Huajun Huang.

#### • Selected Publications

1. **Prakash Ghimire**, Linear Lie centralizers of the algebra of dominant block upper triangular matrices, *Linear and MultiLinear Algebra*, March 2021 (Online), later (Print) <https://doi.org/10.1080/03081087.2021.1902465>
2. **Prakash Ghimire**, Linear Lie centralizers of the algebra of strictly block upper triangular matrices, *Operators and Matrices* 15:1, (2021), 303–311  
<http://oam.ele-math.com/15-21/Linear-Lie-centralizers-of-the-algebra-of-strictly-block-upper-triangular-matrices>
3. **Prakash Ghimire** and Huajun Huang, Derivations of the Lie algebra of strictly block upper triangular matrices, *Journal of Lie Theory* 30:4, (2020), 1027–1046  
<http://www.heldermann.de/JLT/JLT30/JLT304/jlt30050.htm>
4. Gerard G. Dumancas, **Prakash Ghimire**, Ghalib Bello, Jeff Hughes, Renita Murimi, Lakshmi Viswanath, Casey O. Orndorff, Glenda Fe G. Dumancas, Jacy O’Dell, Catherine Setijadi, Chemometrics: From Data Preprocessing to Fog Computing, *International Journal of Fog Computing*, IGI Global, 2019  
<https://www.igi-global.com/article/chemometrics/219359>
5. **Prakash Ghimire** and Huajun Huang, Lie triple derivations of the Lie algebra of dominant block upper triangular matrices, *Algebra Colloquium* 25: 3, (2018) 475-492  
<http://dx.doi.org/10.1142/S1005386718000329>
6. **Prakash Ghimire**, Lie triple derivations of the Lie algebra of strictly block upper triangular matrices, *Journal of Generalized Lie Theory and Applications* 11: 265. 11:1, (2017)  
<https://doi.org/10.4172/1736-4337.1000265>
7. **Prakash Ghimire** and Huajun Huang, Derivations of Lie algebras of dominant upper triangular ladder matrices, [arXiv:1511.08302 \[math.RA\]](https://arxiv.org/abs/1511.08302)

#### • Dissertation

1. PhD Dissertation, **Prakash Ghimire**, Derivations of subalgebras of the Lie algebra of block upper triangular matrices, Auburn University, 2016, <https://etd.auburn.edu/handle/10415/5271>

### 3.2 Selected Conference presentations

- AMS-MAA Joint Mathematics Meetings, Baltimore, MD, January 16 – 19, 2019.
- AMS-MAA Joint Mathematics Meetings, Atlanta, GA, January 4-7, 2017.
- Southern Regional Algebra Conference, Auburn University, Auburn, AL, March 18 – 20, 2016.
- Recent Advances in Linear Algebra and Graph Theory, University of Tennessee at Chattanooga, TN, March 5 – 6, 2016.
- AMS-MAA Joint Mathematics Meetings, Seattle, WA, January 6 – 9, 2016.

- 5th International Conference on Matrix Analysis and Applications, Nova Southeastern University, Fort Lauderdale, Florida, December 17 – 20, 2015.
- AMS Fall Southeastern Sectional Meeting, University of Memphis, Memphis, TN, October 17 – 18, 2015.
- Southern Regional Algebra Conference, University of Louisiana at Lafayette, March 13 – 15, 2015.
- Linear Algebra Seminar, Auburn University, November 2014.