

Laxman Bokati

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RESEARCH STATEMENT

My research integrates AI/ML, remote sensing, and geospatial modeling to address problems in soil, water, carbon, and agricultural systems across continental and farm scales. With a PhD in Computational Science grounded in optimization, decision-making under uncertainty, and the mathematical foundations of machine learning, I have applied this training as a Postdoctoral Research Scholar at Arizona State University to large-scale environmental data: developing reproducible frameworks for harmonizing legacy soil observations, quantifying continental-scale soil carbon storage potential, and benchmarking farm-scale water-use efficiency using OpenET, Sentinel-2 NDVI, and USDA crop and soil data. I also contribute to regime-aware multi-head LSTM architectures for operational streamflow forecasting in arid and semi-arid systems. My future research program develops scalable, interpretable AI frameworks that integrate multi-source satellite, soil, climate, and hydrologic datasets to support monitoring, risk assessment, and management of agricultural and natural-resource systems.

EDUCATION

The University of Texas at El Paso PhD in Computational Science, GPA: 4.00/4.00	El Paso, TX 2019–2022
– Dissertation: “Decision Making Under Uncertainty With Special Emphasis On Geosciences And Education”	
The University of Texas at El Paso M.S. in Computational Science, GPA: 4.00/4.00	El Paso, TX 2017–2019
– Thesis: “Decision Making Under Uncertainty With Applications To Geosciences And Finance”	
Institute of Engineering — Tribhuvan University B.Sc. in Electrical Engineering, GPA: 3.66	Kathmandu, Nepal 2008–2012

EXPERIENCE

Arizona State University Postdoctoral Research Scholar	Tempe, Az 2022-Current
– Led the integration of diverse multi-decadal geo-spatial soil datasets, developing unification methods to facilitate comprehensive soil analysis.	
– Developed and implemented temporal adjustment framework to generate present-day equivalent values of Soil Organic Carbon (SOC), enhancing the accuracy and relevance of harmonized soil profile data.	
– Spearheaded the compilation and structuring of remotely sensed data from various sources, optimizing it for advanced geo-spatial AI/ML modeling applications.	
– Developed and applied AI/ML-driven models for soil health and carbon assimilation potential, contributing to the advancement of soil science and environmental sustainability.	
– Created high-resolution continental-scale baseline and attainable SOC maps and developed down-scaling techniques, significantly improving the granularity and utility of SOC maps for research and policy-making.	

- Led the development of the Attainable-ET project, designing farm-scale evapotranspiration benchmarks using remote sensing, crop yield classification, and AI/ML models to optimize agricultural water use and guide conservation strategies.
- Assisted in modeling dynamic streamflow forecasting for Arizona streams, integrating conventional forecast models with AI-driven models to capture rapid changes in hydrological drivers such as forest fires and extreme heat.
- Partnered with researchers from Jackson State University to assess heatwave impacts and enhance climate resilience in highly populated US cities, using AI/ML models to analyze heatwave occurrences and propose urban resilience strategies.
- Successfully developed research proposals, secured funding for projects, and presented research findings at prestigious scientific conferences and events, demonstrating strong communication and leadership skills in the academic community.
- Assisted with graduate courses in Remote Sensing and Remote Sensing for Water Resources, helping students integrate satellite observations, Python-based analysis, and environmental interpretation.
- Mentored graduate and undergraduate students on machine learning, data science, and geospatial modeling projects linking satellite and remote-sensing data with soil, hydrological, and environmental processes; contributed to methodology discussions, academic writing, and joint publications.

The University of Texas at El Paso

El Paso, TX

Teaching Assistant: Computational Science Program & Department of Computer Science

2017-2022

- Assisted faculty in preparation, teaching, and grading of diverse range of courses, including: Calculus I, Calculus II, Calculus III, Matrix Algebra, Introduction to Analysis, Numerical Analysis, Discrete Mathematics, Elementary Statistical Methods, Automata, Computability and Formal Languages, Multivariate Data Analysis, and Theory of Computation.
- Supported faculty in managing laboratory sessions and overseeing student research projects, fostering a hands-on learning environment and promoting research engagement.
- Provided tutoring and academic support to undergraduate students at the Math Resource Center for Students, enhancing their understanding of complex mathematical and computational concepts and contributing to their academic success.

Aastha Engineering Solution Pvt.Ltd.

Kathmandu, Nepal

Project Engineer

2013-2016

- Conducted feasibility studies and identified potential sites for several wind-solar hybrid projects in Nepal for, for Alternate Energy Promotion Centre, Nepal.
- Performed an extensive study on the carbon credit potential in Nepalese industries for for Ministry of Industry, Nepal.
- Collaborated with innovators to promote eco-friendly technologies, such as the “Matribhumi Improved Cooking Stove” and the “Low Energy Solar Water Pump,” facilitating their adoption and impact.
- Managed the design and implementation of temporary shelter buildings (“Aashrya”) in multiple earthquake-affected districts, providing crucial support in disaster response efforts.
- Prepared project proposals, managed resources and manpower, and compiled final reports, ensuring successful project execution and compliance with objectives.
- Represented Aastha Engineering Solution in various workshops and training programs, advocating for renewable energy and sustainable development.
- Assisted in the survey, development, promotion, and dissemination of various renewable energy projects, contributing to the expansion of sustainable energy solutions in Nepal.
- Supervised field visits and coordinated information collection, ensuring accurate and comprehensive data for project planning and implementation.

SELECTED JOURNAL ARTICLES

- Laxman Bokati, Anil C. Somenahally, Saurav Kumar, Rahul Perepi, Reshmi Sarkar, Rocky Talchabhadel and Javad Robotjazi “**Temporal adjustment approach for high-resolution continental scale modeling of soil organic carbon**”, *Scientific Reports*, 2025, Vol. 15, Article No. 6483.
- Laxman Bokati, Saurav Kumar, Anil C. Somenahally “**Soil Carbon Modeling at Crossroads: Building Reliable Methods for Policy and Practice**”, *European Journal of Soil Science*, 2026, Vol. 77, No. 2, Article No. e70295.
- Anil C. Somenahally, Laxman Bokati, Saurav Kumar, “**Estimating soil organic carbon deficits at the continental scale using legacy-data-driven dynamic baseline and attainable projections**”, *Geoderma*, 2025, Vol. 462, Article No. 117515.
- Saurav Bhattarai, Laxman Bokati, Sanjib Sharma, and Rocky Talchabhadel “**Understanding spatiotemporal variation of heatwave projections across US cities**”, *Scientific Reports*, 2025, Vol. 15, Article No. 10643.
- Kshitij Dahal, Atharva Gupta, Laxman Bokati, Saurav Kumar, “**Ensemble Streamflow Forecasting With Diverse Loss Functions**”, *Applied Soft Computing*, 2026, Vol. 198, Article No. 115276.
- Saven Thai, Anil Somenahally, Javad Robotjazi, Laxman Bokati, Rocky Talchabhadel, Saurav Kumar “**Mapping Soil pH Baselines, Trends, and Time-to-Critical Crop Risk across CONUS Using Harmonized Legacy Datasets: A Large-Scale Assessment**”, *Journal of Environmental Management*, 2026, Vol. 404, Article No. 129508.

OTHER JOURNAL ARTICLES

- Laxman Bokati, Nisarg Shah, Saurav Kumar, “**A Peer-Conditioned Attainable Evapotranspiration Framework for Diagnosing Field-Scale Water-Use Efficiency**”, *Manuscript in preparation*.
- Solymar Ayala Cortez, Laxman Bokati, Aaron Velasco, and Vladik Kreinovich “**Why Daubechies wavelets are so successful**”, *Journal of Intelligent and Fuzzy Systems*, 2022, Vol. 43, No. 6, pp. 6933–6938.
- Supanika Leurcharusmee, Laxman Bokati, Olga Kosheleva, and Vladik Kreinovich, “**Why Linear Expressions in Discounting and in Empathy: A Symmetry-Based Explanation**”, *Soft Computing*, 2021.
- Hoang Phuong Nguyen, Laxman Bokati, Vladik Kreinovich “**A New (Simplified) Derivation of Nash’s Bargaining Solution**”, *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)*, 2020, Vol. 24, No. 5, pp. 589–592.
- Laxman Bokati, Hoang Phuong Nguyen, Olga Kosheleva, and Vladik Kreinovich, “**How to Combine (Dis)Utilities of Different Aspects into a Single (Dis)Utility Value, and How This Is Related to Geometric Images of Happiness**”, *Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII)*, 2020, Vol. 24, No. 5, pp. 599–603.
- Bibek Aryal, Laxman Bokati, Karla Godinez, Shammir Ibarra, Heyi Liu, Bofei Wang, and Vladik Kreinovich, “**Common Sense Addition Explained by Hurwicz Optimism-Pessimism Criterion**”, *Journal of Uncertain Systems*, 2019, Vol. 13, No. 3, pp. 172–175.
- Laxman Bokati, Olga Kosheleva, and Vladik Kreinovich, “**When Revolutions Succeed? 80/20 Rule and 7 Plus Minus 2 Law Explain the 3.5% Rule**”, *Journal of Uncertain Systems*, 2019, Vol. 13, No. 3, pp. 186–188.
- Laxman Bokati and Vladik Kreinovich, “**Decision theory can explain why buying and selling prices are different**”, *Journal of Uncertain Systems*, 2019, Vol. 13, No. 3, pp. 189–192.
- Thach Ngoc Nguyen, Laxman Bokati, Aaron Velasco, and Vladik Kreinovich, “**Bhutan Landscape Anomaly: Possible Effect on Himalayan Economy (In View of Optimal Description of Elevation Profiles)**”, *Thai Journal of Mathematics, Special issue Structural Change Modeling and Optimization in Econometrics*, 2019, pp. 57–69.

CONFERENCE PAPERS

- Laxman Bokati and Vladik Kreinovich “**Why Exponential Almon Lag Works Well in Econometrics: An Invariance-Based Explanation**”, *Proceedings of the 11th IEEE International Conference on Intelligent Systems IS’22*, Warsaw, Poland, October 12-14, 2022.

- Laxman Bokati and Vladik Kreinovich “**Why Smaller-Size Objects Affect the Flow Much More than Larger Ones: A Geometric Explanation with Applications Ranging from Volcanoes and Tornadoes to Blood, Fish, and Building Preservation**”, *Proceedings of the 11th IEEE International Conference on Intelligent Systems IS'22*, Warsaw, Poland, October 12-14, 2022.
- Laxman Bokati, Olga Kosheleva, and Vladik Kreinovich, “**How to elicit complex-valued fuzzy degrees**”, *Proceedings of the 2022 Annual Conference of North American Fuzzy Information Processing Society*, Halifax, Nova Scotia, Canada, May 31 - June 3, 2022.
- Laxman Bokati, Olga Kosheleva, and Vladik Kreinovich, “**How Much For a Set: General Case of Decision Making Under Set-Valued Uncertainty**”, In: Julia Rayz, Victor Raskin, Scott Dick, and Vladik Kreinovich (eds.), “*Explainable AI and Other Applications of Fuzzy Techniques, Proceedings of the Annual Conference of the North American Fuzzy Information Processing Society NAFIPS 2021*”, West Lafayette, Indiana, June 7-9, 2021, Springer, Cham, Switzerland, 2022, pp. 400-405.
- Kelly Cohen, Laxman Bokati, Martine Ceberio, Olga Kosheleva, and Vladik Kreinovich, “**Why Fuzzy Techniques in Explainable AI? Which Fuzzy Techniques in Explainable AI?**”, In: Julia Rayz, Victor Raskin, Scott Dick, and Vladik Kreinovich (eds.), “*Explainable AI and Other Applications of Fuzzy Techniques, Proceedings of the Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2021*”, West Lafayette, Indiana, June 7-9, 2021, Springer, Cham, Switzerland, 2022, pp. 74-78.
- Laxman Bokati, Aaron Velasco, and Vladik Kreinovich, “**Scale-Invariance and Fuzzy Techniques Explain the Empirical Success of Inverse Distance Weighting and of Dual Inverse Distance Weighting in Geosciences**”, *Proceedings of the Annual Conference of the North American Fuzzy Information Processing Society NAFIPS'2020*, Redmond, Washington, August 20–22, 2020.
- Laxman Bokati, Olga Kosheleva, and Vladik Kreinovich, “**It Is Important to Take All Available Information into Account When Making a Decision: Case of the Two Envelopes Problem**”, *Proceedings of the 4th International Conference on Intelligent Decision Science IDS'2020*, Istanbul, Turkey, August 7-8, 2020.
- Laxman Bokati, Olga Kosheleva, Vladik Kreinovich, and Anibal Sosa, “**Why Deep Learning Is More Efficient than Support Vector Machines, and How It Is Related to Sparsity Techniques in Signal Processing**”, *Proceedings of the 2020 4th International Conference on Intelligent Systems, Metaheuristics & Swarm Intelligence ISMSI'2020*, Thimpu, Bhutan, April 18-19, 2020.
- Oscar Galindo, Laxman Bokati, and Vladik Kreinovich, “**Towards a More Efficient Representation of Functions in Quantum and Reversible Computing**”, *Proceedings of the Joint 11th Conference of the European Society for Fuzzy Logic and Technology EUSFLAT'2019 and International Quantum Systems Association (IQSA) Workshop on Quantum Structures*, Prague, Czech Republic, September 9–13, 2019.
- Bartłomiej Jacek Kubica, Laxman Bokati, Olga Kosheleva, and Vladik Kreinovich, “**Softmax and McFadden’s Discrete Choice under Interval (and Other) Uncertainty**”, In: Roman Wyrzykowski, Ewa Deelman, Jack Dongarra, and Konrad Karczewski (eds.), *Proceedings of the International Conference on Parallel Processing and Applied Mathematics PPAM'2019*, Białystok, Poland, September 8-11, 2019, Springer, 2020, Vol. II, pp. 364-373.

RESEARCH BOOK/CHAPTERS

- Laxman Bokati and Vladik Kreinovich, “**Decision Making Under Uncertainty, with a Special Emphasis on Geosciences and Education**”, *Studies in Systems, Decision and Control*, Springer Verlag, Cham, Switzerland, 2023.
- Laxman Bokati, Olga Kosheleva, Vladik Kreinovich, and Nguyen Ngoc Thach, “**Why Shapley Value and Its Variants Are Useful in Machine Learning (and in Other Applications)**”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Woraphon Yamaka (eds.), *Machine Learning for Econometrics and Related Topics*, Springer, Cham, Switzerland, 2024, pp. 169-174.
- Laxman Bokati, Aaron Velasco, Vladik Kreinovich, and Kittawit Autchariyapanitkul, “**A Possible Common Mechanism Behind Skew Normal Distributions in Economics and Hydraulic Fracturing-Induced Seismicity**”, In: Vladik Kreinovich, Songsak Sriboonchitta, and Woraphon Yamaka (eds.), *Machine Learning for Econometrics and Related Topics*, Springer, Cham, Switzerland, 2024, pp. 175-179.
- Laxman Bokati, Aaron Velasco, Vladik Kreinovich, and Kittawit Autchariyapanitkul, “**Why Quantiles Are a Good Description of Volatility in Economics: An Alternative Explanation**”, In: Nguyen Ngoc Thach,

Vladik Kreinovich, Doan Thanh Ha, and Nguyen Duc Trung (eds.), *Optimal Transport Statistics for Economics and Related Topics*, Springer, Cham, Switzerland, 2023, pp. 169-173.

- Laxman Bokati, Vladik Kreinovich, Joseph Baca, and Natasha Rovelli, “**Why Rectified Power (ReLU) Activation Functions Are Efficient in Deep Learning: A Theoretical Explanation**”, In: *Martine Ceberio and Vladik Kreinovich (eds.), Uncertainty, Constraints, and Decision Making*, Springer, Cham, Switzerland, 2023, pp. 7-13.
- Laxman Bokati, Olga Kosheleva, and Vladik Kreinovich, “**Why Rarity Score Is a Good Evaluation of a Non-Fungible Token**”, In: *Martine Ceberio and Vladik Kreinovich (eds.), Uncertainty, Constraints, and Decision Making*, Springer, Cham, Switzerland, 2023, pp. 69-74.
- Laxman Bokati and Vladik Kreinovich “**Why Time Seems to Pass Slowly for Unpleasant Experiences and Quickly for Pleasant Experiences: An Explanation Based on Decision Theory**”, In: *Martine Ceberio and Vladik Kreinovich (eds.), Uncertainty, Constraints, and Decision Making*, Springer, Cham, Switzerland, 2023, pp. 257-261.
- Laxman Bokati, Olga Kosheleva, Vladik Kreinovich, and Nguyen Hoang Phuong, “**Why Decreased Gaps Between Brain Cells Cause Severe Headaches: A Symmetry-Based Geometric Explanation**”, In: *Nguyen Hoang Phuong and Vladik Kreinovich (eds.), Deep Learning and Other Soft Computing Techniques: Biomedical and Related Applications*, Springer, Cham, Switzerland, 2023, pp. 35-38.
- Laxman Bokati, Olga Kosheleva, Vladik Kreinovich, and Nguyen Ngoc Thach, “**Economics of Reciprocity and Temptation**”, In: *Songsak Sriboonchitta, Vladik Kreinovich, Woraphon Yamaka (eds.), Credible Asset Allocation, Optimal Transport Methods, and Related Topics*, Springer, Cham, Switzerland, 2022, pp. 31-38.
- William Kubin, Yi Xie, Laxman Bokati, Vladik Kreinovich, and Kittawit Autchariyapanitkul, “**Why Geometric Progression in Selecting the LASSO Parameter: A Theoretical Explanation**”, In: *Songsak Sriboonchitta, Vladik Kreinovich, Woraphon Yamaka (eds.), Credible Asset Allocation, Optimal Transport Methods, and Related Topics*, Springer, Cham, Switzerland, 2022, pp. 195-202.
- Vladik Kreinovich, Olga Kosheleva, and Laxman Bokati, “**How to Make Sure That Robot’s Behavior Is Human-Like**”, In: *Bin Wei (ed.), Brain and Cognitive Intelligence – Control in Robotics*, CRC Press, Boca Raton, Florida, 2022, pp. 70-80.
- Laxman Bokati, Vladik Kreinovich, and Chon Van Le, “**How to Explain the Anchoring Formula in Behavioral Economics**”, In: *Nguyen Ngoc Thach, Doan Thanh Ha, Nguyen Duc Trung, and Vladik Kreinovich (eds.), Prediction and Causality in Econometrics and Related Topics*, Springer, Cham, Switzerland, 2022, pp. 28-34.
- Laxman Bokati, Vladik Kreinovich, and Doan Thanh Ha, “**How the Proportion of People Who Agree to Perform a Task Depends on the Stimulus: A Theoretical Explanation of the Empirical Formula**”, In: *Nguyen Ngoc Thach, Doan Thanh Ha, Nguyen Duc Trung, and Vladik Kreinovich (eds.), Prediction and Causality in Econometrics and Related Topics*, Springer, Cham, Switzerland, 2022, pp. 22-27.
- Laxman Bokati, Aaron Velasco, and Vladik Kreinovich, “**Absence of Remotely Triggered Large Earthquakes: A Geometric Explanation**”, In: *Martine Ceberio and Vladik Kreinovich (eds.) How Uncertainty-Related Ideas Can Provide Theoretical Explanation for Empirical Dependencies*, Springer, Cham, Switzerland, 2021, pp. 37-41.
- Laxman Bokati, Olga Kosheleva, and Vladik Kreinovich, “**How Can We Explain Different Number Systems?**”, In: *Martine Ceberio and Vladik Kreinovich (eds.), How Uncertainty-Related Ideas Can Provide Theoretical Explanation for Empirical Dependencies*, Springer, Cham, Switzerland, 2021, pp. 21-26.
- Laxman Bokati, Julio Urenda, Olga Kosheleva, and Vladik Kreinovich, “**Why Immediate Repetition Is Good for Short-Term Learning Results but Bad For Long-Term Learning: Explanation Based on Decision Theory**”, In: *Martine Ceberio and Vladik Kreinovich (eds.), How Uncertainty-Related Ideas Can Provide Theoretical Explanation for Empirical Dependencies*, Springer, Cham, Switzerland, 2021, pp. 27-35.
- Laxman Bokati, Aaron Velasco, and Vladik Kreinovich, “**Why Gamma Distribution of Seismic Inter-Event Times: A Theoretical Explanation**”, In: *Martine Ceberio and Vladik Kreinovich (eds.), How Uncertainty-Related Ideas Can Provide Theoretical Explanation for Empirical Dependencies*, Springer, Cham, Switzerland, 2021, pp. 43-50.
- Vladik Kreinovich, Olga Kosheleva, and Laxman Bokati, “**We Need Fuzzy Techniques to Design Successful Human-Like Robots**”, In: *Cengiz Kahraman and Eda Bolturk (Eds.), Toward Humanoid Robots: The Role of Fuzzy Sets*, Springer, Cham, Switzerland, 2021, pp. 121-131.

POSTERS/PRESENTATIONS

- **Overlooked Biases in Machine-Learning Soil-Carbon Maps: Depth Autocorrelation, Circular Density Logic, and Validation Gaps** at AGU25 Conference, New Orleans, LA, December 15- 19, 2025.
- **Leveraging AI Methods for Improving Continental Scale Modeling of Soil Organic Carbon** at CANVAS 2025, Salt Lake City, Utah, November 9-12 2025.
- **Identifying “Attainable-ET” Benchmarks to Guide Irrigation Water Optimization in Arizona Agriculture** at ASU Flow 2025, Arizona Hydrological Society Symposium, Phoenix, Arizona, October 1, 2025.
- **Using Convolutional Neural Networks and Transfer Learning for Soil Organic Carbon and Plant Available Water Modeling in Data-Sparse Regions** at EWRI 2025, Anchorage, Alaska, May 18 - 21, 2025.
- **Multi-Model and Multi-Scale Operational Streamflow Forecasting in Arid and Semi-Arid Regions Using Machine Learning and Data Synergy** at EWRI 2025, Anchorage, Alaska, May 18 - 21, 2025.
- **Comparison of Quantitative and Qualitative Shifts in Soil Organic Carbon Stocks at Continental Scale** at 2024 ASA, CSSA, SSSA International Annual Meeting, San Antonio, TX, November 10-13, 2024.
- **Evaluating LSTM and Temporal Fusion Transformer for Streamflow Forecasting in Arid and Semi-Arid Regions** at CMWR 2024, Tucson, Arizona, September 30 - October 3, 2024.
- **Predicting Soil Organic Carbon and Essential Soil Parameter’s Using Remote Sensing: Implications on Regenerative Agriculture and Food Security** at AGU Chapman Conference: Remote Sensing of the Water Cycle: Sensors to Science to Society, Honolulu, Hawaii, February 13- 16, 2024.
- **Towards Open-source Software Infrastructure for Assessing Climate Change Projections** at AGU23 Conference, San Francisco, California, December 11- 15, 2023.
- **Assessing Heatwave Impacts and Enhancing Climate Resilience in Highly Populated US Cities** at AGU23 Conference, San Francisco, California, December 11- 15, 2023.
- **Advancing Scalable Spatial and Temporal Predictions of Soil Organic Carbon** at 2023 ASA, CSSA, SSSA International Annual Meeting, St. Louis, Missouri, October 29- November 1, 2023.
- **How We Humans Fuse Different Types of Uncertainty when Making Decisions** at Data and Information Fusion Conference DIF, Santa Fe, New Mexico, August 20-22, 2019.
- **How to Generate “Nice” Cubic Polynomials – with Rational Coefficients, Rational Zeros and Rational Extrema: A Fast Algorithm** at 2019 Southwest Local Algebra Meeting (SLAM), El Paso, Texas, February 23-24, 2019.
- **Common Sense Addition Explained by Hurwicz Optimism-Pessimism Criterion** at 23rd Joint UTEP/NMSU Workshop on Mathematics, Computer Science, and Computational Sciences, El Paso, Texas, November 3, 2018.

SKILLS

- **Programming Languages:** Python, R, MATLAB, C
- **AI/ML & Deep Learning:** PyTorch, TensorFlow/Keras, scikit-learn, XGBoost; LSTM, CNN, Temporal Fusion Transformer, and transfer-learning architectures applied to soil, hydrology, and climate data
- **Geospatial & Remote Sensing:** Google Earth Engine, ArcGIS Pro, ENVI; GDAL, Rasterio, GeoPandas; continental-scale remote-sensing data integration and downscaling
- **Workflow & Reproducibility:** Git/GitHub, Conda/virtualenv, Docker, Jupyter/Google Colab, ASU Sol HPC cluster
- **Technical Writing:** Article, Proposal, Report, Poster, Presentation; LaTeX, MS Office (Word, PowerPoint, Excel)
- **Languages:** English, Hindi, Nepali

AWARDS AND GRANTS

- **Project Grant (PI)** *Arizona Water Innovation Initiative* “**Identify “Attainable-ET” Benchmarks for Arizona Agriculture**” –2025
- **Project Grant (Co-PI)** *Arizona Water Innovation Initiative* “**Dynamic streamflow forecasting for Arizona Streams**” –2024
- **Travel Grant** *AGU Chapman Conference: Remote Sensing of the Water Cycle*, Honolulu, Hawaii, USA
“**Predicting Soil Organic Carbon and Essential Soil Parameter’s Using Remote Sensing: Implications on Regenerative Agriculture and Food Security**” –2024
- **Academic and Research Excellence** *Precommencent Awards College of Science* “**University of Texas at El Paso**” –2022
- **Outstanding Paper Award** *Annual Conference of North American Fuzzy Information Processing Society NAFIPS’22*, Halifax, Nova Scotia, Canada for “**How to elicit complex-valued fuzzy degrees**” –2022
- **Best Student Paper Award Interval Session** *Annual Conference of the North American Fuzzy Information Society NAFIPS’21*, for “**How Much For a Set: General Case of Decision Making Under Set-Valued Uncertainty**” –2021

REFERENCES

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