

SIRISH SHRESTHA

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Innovative AI leader with 10+ years of experience transforming emerging technologies into scalable products. Proven track record in strategy, machine learning, and cross-functional leadership, bridging research and real-world application to drive lasting impact.

RELEVANT SKILLS



EXPERIENCE

Center for Creative Leadership (CCL), Greensboro, NC

01/2020 – Present

Senior Data Scientist

- Resident expert in CCL's AI-driven transformation, including developing product prototypes using GenAI, ML, software engineering.
- Authored the 5-year AI strategic roadmap to position CCL as a leader in applied AI for leadership development.
- Led development and launch of innovative platforms, including the Hi-FI behavioral diagnostics system and Leadership Challenge Ladder automation, integrating GenAI and ML into product design writing code and designing product from concept to production.
- Served as resident AI strategist, technical advisor, primary developer across initiatives, including **VICKI AI chatbot**, **Leadership.ai**, and **Talent X-Ray**, streamlining internal operations and leadership programs, and for internal efficiencies.
- Developed leadership persona modeling through machine learning to integrate it into CCL's **Leadership by Design** framework.
- Published peer-reviewed research articles including synthetic data and innovation methods; recognized for editorial excellence, star performers, and evaluating multirater assessment methods.
- Contributed to open-source software for research projects and prototyped apps based on the research findings for synthetic data generation.
- Partnered with the Global Technology Team (GTT) to build and scale AI and data science infrastructure using Azure and OpenAI technologies.

- Co-led CCL's Data Science Community of Practice, embedding experimentation and upskilling across the organization.
- Delivered enterprise training and consultation on data governance, AI tooling, and leadership diagnostics integration.
- Mentored junior data scientists and interns, fostering growth in advanced analytics, R package development, and applied experimentation.
- Collaborated with GTT to deploy microservices on cloud infrastructure on Azure Cloud and Azure OpenAI.

WVU Medicine Heart and Vascular Institute, Morgantown, WV 9/2017 – 12/ 2019
Biostatistician/Data Scientist Lead

- Directed operations of the **Clinical Innovation Lab**, leading data lifecycle management and cutting-edge AI-driven cardiovascular research across imaging, phenotyping, and diagnostics.
- Co-Investigator on nationally recognized research, including **Arthur E. Weyman Young Investigator Award**—winning work (2019).
- Led cross-disciplinary collaborations with cardiologists, imaging experts, and engineers to design and deliver impactful data science solutions.
- Spearheaded national ML governance efforts as **Vice-Chair of the PRIME Checklist**, shaping evaluation standards for cardiovascular AI in partnership with American College of Cardiology.
- Launched the **CHOICE community screening program** in partnership with American Society of Echocardiography and industry stakeholders, driving regional public health impact.
- Developed predictive modeling pipelines using Python and SQL, increasing high-risk patient identification and recruitment by 20%.
- Applied advanced statistical methods, including **Topological Data Analysis (TDA)**, to uncover complex cardiovascular risk profiles.
- Mentored clinical researchers in biostatistics, ML, and publication strategy, elevating research rigor and output.
- Built scalable data workflows, ensuring secure management of sensitive imaging and clinical datasets across remote environments.

Arowana Foundation for Empowerment, Care, and Transformation (AFFECT), Morgantown, WV 06/2016 – Present
Founder & CEO

- Founded and led a mission-driven organization advancing **health equity, education, and community empowerment** in underserved regions.
- Orchestrated emergency response efforts after the 2015 Nepal earthquake, mobilizing funding, resources, and on-the-ground relief.
- Partnered with **West Virginia University Medicine** to lead physician-led medical missions in rural Nepal, delivering care to over 2,000 patients.
- Secured and managed a **\$10,000 international research grant** to implement sustainable **POCUS training and telemedicine QA** systems in remote hospitals.

- Promoted long-term capacity-building by establishing remote clinical education protocols and image review programs.
- Co-created and delivered **Python programming courses** for youth, fostering digital literacy and STEM access in underserved schools.

WVU School of Pharmacy, Morgantown, WV

02/2015 – 07/2017

Information Systems Manager

- Directed enterprise IT and data strategy to modernize health systems infrastructure for West Virginia Medicaid and Public Employee Insurance programs, driving digital transformation across pharmacy services.
- Championed innovation in healthcare operations by leading the design and rollout of scalable technology solutions that improved workflow efficiency by over 30%.
- Oversaw cross-functional coordination with clinicians, policy leaders, and IT teams to align technology development with organizational goals and healthcare regulations.
- Led the strategic vision, planning, and implementation of a real-time analytics ecosystem to support executive decision-making using modern data visualization platforms.
- Developed policy-driven data management protocols to maintain the security, compliance, and governance of sensitive health data (PHI).
- Authored formal project documentation, statements of work, and strategic requirements that guided vendor partnerships and secured state-level adoption.
- Established risk mitigation frameworks, including disaster recovery and business continuity planning, to ensure operational resilience across systems.
- Introduced and led the transition to cloud-based big data solutions (Azure HDInsight), laying the groundwork for predictive analytics and AI-readiness in public health initiatives.
- Promoted a culture of continuous improvement by integrating stakeholder feedback loops, agile experimentation, and innovation mindsets into all phases of system planning and implementation.

EDUCATION

- **M.S., Statistics**, West Virginia University, 2015
- **M.S., Software Engineering**, West Virginia University (non-degree)
- **B.S., Computer Science**, Fairmont State University, 2009

AWARDS

- Best research award (American College of Cardiology West Virginia Chapter), 2019
- The Nancy Sanders memorial Faculty Research Abroad Grant, 2019

PATENT

- Sengupta, Partho P., Shrestha, Sirish, Kagiya, Nobuyuki. Cardiac Ultrasonic Fingerprinting: An Approach for High Throughput Myocardial Feature Phenotyping (2022) West Virginia University (Morgantown, WV, US). 20220238208. <https://www.freepatentsonline.com/y2022/0238208.html>
- Shrestha, S., Sen, S. User-configurable prompt generator and optimizer using natural language processing. (2023) Center for Creative Leadership, Greensboro, NC, US. Filed.

CERTIFICATES

- CCL's Maximizing Leadership Potential (MLP), 2021.
- Data Science Certificate, MIT, 2017
- Deep Learning Certificate, (Coursera / Nvidia), 2017

MEDIA MENTIONS

- Global Engagement Office Announces Research Grant Awardees, School of Medicine | West Virginia University. <https://medicine.hsc.wvu.edu/News/Story?headline=global-engagement-office-announcesresearch-grant-awardees>. Accessed 28 Dec. 2020.
- WVU Heart and Vascular Institute Garnering National Attention for Work in Artificial Intelligence in Diagnostic Cardiology, School of Medicine | West Virginia University. https://medicine.wvu.edu/News/Story?headline=wvu-heart-and-vascular-institute-garneringnational-attention-for-work-in-artificial-intelligen_0. Accessed 28 Dec. 2020.

RESEARCH EXPERIENCE

- Loignon, A., Fonti, F., Bagherzadeh, M., Gurca, A., & Shrestha, S. (2025). When more is less: The role of social capital in managing talent in teams. *Academy of Management Discoveries*. <https://doi.org/10.5465/amd.2023.0039>
- Wang, P., Loignon, A.C., Shrestha, S. et al. Advancing Organizational Science Through Synthetic Data: A Path to Enhanced Data Sharing and Collaboration. *J Bus Psychol* (2024). <https://doi.org/10.1007/s10869-024-09997-w>
- Furr, R. M., Jeong, S. B., Fleenor, J. W., & Shrestha, S. (2024). Evaluating a novel method of scoring multirater assessments of leader competencies. *Consulting Psychology Journal*, 76(4), 348–366. <https://doi.org/10.1037/cpb0000285>
- Kagiya, N., **Shrestha, S.**, & Sengupta, P. P. (2021). Future Applications of Strain Imaging. In *ASE's Comprehensive Strain Imaging* (pp. 220-235). Elsevier. <https://doi.org/10.1016/B978-0-323-75947-2.00019-2>

- Karthik Seetharam, Sirish Shrestha, Partho P Sengupta, Cardiovascular Imaging and Intervention Through the Lens of Artificial Intelligence, *Interventional Cardiology* 2021;16:e31. <https://doi.org/10.15420/icr.2020.04>
- Sengupta, P. P., **Shrestha, S.**, Berthon, B., Messas, E., Donal, E., Tison, G. H., Min, J. K., D'hooge, J., Voigt, J. U., Dudley, J., Verjans, J. W., Shameer, K., Johnson, K., Lovstakken, L., Tabassian, M., Piccirilli, M., Pernot, M., Yanamala, N., Duchateau, N., ... Arnaout, R. (2020). Proposed Requirements for Cardiovascular Imaging-Related Machine Learning Evaluation (PRIME): A Checklist: Reviewed by the American College of Cardiology Healthcare Innovation Council. *JACC: Cardiovascular Imaging*, 13(9), 2017–2035. <https://doi.org/10.1016/j.jcmg.2020.07.015>
- Banga, S., Osman, M., Sengupta, P. P., Benjamin, M. M., **Shrestha, S.**, Challa, A., Zeb, I., Kadiyala, M., Mills, J., Balla, S., Raybuck, B., Seetharam, K., & Hamirani, Y. S. (2020). CT assessment of the left atrial appendage post-transcatheter occlusion – A systematic review and meta analysis. *Journal of Cardiovascular Computed Tomography*. <https://doi.org/10.1016/j.jcct.2020.12.003>
- Abdul Ghffar, Y., Osman, M., **Shrestha, S.**, Shaukat, F., Kagiya, N., Alkhouli, M., Raybuck, B., Badhwar, V., & Sengupta, P. P. (2020). Usefulness of Semisupervised Machine-Learning-Based Phenogrouping to Improve Risk Assessment for Patients Undergoing Transcatheter Aortic Valve Implantation. *American Journal of Cardiology*. <https://doi.org/10.1016/j.amjcard.2020.08.048>
- Benjamin, M. M., Bianco, C., Caccamo, M., Sokos, G., Kagiya, N., **Shrestha, S.**, Verzosa, G., & Sengupta, P. P. (2020). Non-invasive prediction of tissue Doppler-derived E/e' ratio using lung Doppler signals. *European Heart Journal Cardiovascular Imaging*, 21(9), 994–1004. <https://doi.org/10.1093/ehjci/jeaa090>
- Cho, J. S., **Shrestha, S.**, Kagiya, N., Hu, L., Ghaffar, Y. A., Casacang-Verzosa, G., Zeb, I., & Sengupta, P. P. (2020). A Network-Based “Phenomics” Approach for Discovering Patient Subtypes from High Throughput Cardiac Imaging Data. *JACC: Cardiovascular Imaging*, 13(8), 1655–1670. <https://doi.org/10.1016/j.jcmg.2020.02.008>
- Dey, D., Slomka, P. J., Leeson, P., Comaniciu, D., **Shrestha, S.**, Sengupta, P. P., & Marwick, T. H. (2019). Artificial Intelligence in Cardiovascular Imaging: JACC State-of-the-Art Review. *Journal of the American College of Cardiology*, 73(11). <https://doi.org/10.1016/j.jacc.2018.12.054>
- Kagiya, N., Piccirilli, M., Yanamala, N., **Shrestha, S.**, Farjo, P. D., Casacang-Verzosa, G., Tarhuni, W. M., Nezarat, N., Budoff, M. J., Narula, J., & Sengupta, P. P. (2020). Machine Learning Assessment of Left Ventricular Diastolic Function Based on Electrocardiographic Features. *Journal of the American College of Cardiology*, 76(8), 930–941. <https://doi.org/10.1016/j.jacc.2020.06.061>
- Kagiya, N., & **Shrestha, S.** (2020). Echocardiographic assessment of mitral regurgitation. *Journal of Medical Ultrasonics*, 47(1), 59–70. <https://doi.org/10.1007/s10396-019-00971-1>
- Kagiya, N., **Shrestha, S.**, Cho, J. S., Khalil, M., Singh, Y., Challa, A., Casacang-verzosa, G., & Sengupta, P. P. (2020). EBioMedicine A low-cost texture-based pipeline for predicting

myocardial tissue remodeling and fibrosis using cardiac ultrasound. *EBioMedicine*, 54, 102726. <https://doi.org/10.1016/j.ebiom.2020.102726>

- Kagiya, N., **Shrestha, S.**, Farjo, P. D., & Sengupta, P. P. (2019). Artificial Intelligence: Practical Primer for Clinical Research in Cardiovascular Disease. *Journal of the American Heart Association*, 8(17), e012788. <https://doi.org/10.1161/JAHA.119.012788>
- Magro, A., Magro, A., **Shrestha, S.**, Brundage, K., & Rankin, G. (2014). Metalloproteinase dependent reduction of cell surface cluster determinants upon the induction of apoptosis. *International Journal of Oncology*, 44(5), 1539–1550. <https://doi.org/10.3892/ijo.2014.2344>
- Seetharam, K., Kagiya, N., **Shrestha, S.**, & Sengupta, P. P. (2020). Clinical Inference From Cardiovascular Imaging: Paradigm Shift Towards Machine-Based Intelligent Platform. *Current Treatment Options in Cardiovascular Medicine*, 22(3), 8. <https://doi.org/10.1007/s11936-020-0805-5>
- Seetharam, K., **Shrestha, S.**, & Sengupta, P. P. (2019). *Trends Artificial Intelligence in Cardiac Imaging*. 110–116.
- Seetharam, K., **Shrestha, S.**, Mills, J. D., & Sengupta, P. P. (2019). *Artificial Intelligence in Nuclear Cardiology : Adding Value to Prognostication*. 8, 10–15.
- Sengupta, P. P., & **Shrestha, S.** (2018). Machine Learning for Data-Driven Discovery. *JACC: Cardiovascular Imaging*, 0–2. <https://doi.org/10.1016/j.jcmg.2018.06.030>
- Sengupta, P. P., **Shrestha, S.**, & Zeb, I. (2020). Solving coronary risk: time to feed machines some calcium (score) supplements. In *European heart journal* (Vol. 41, Issue 3, pp. 368–370). <https://doi.org/10.1093/eurheartj/ehz708>
- **Shrestha, S.**, Casacang-Verzosa, G., Khalil, M. J., Cho, J. S., Tokodi, M., Balla, S., Alkhouli, M., Badhwar, V., Narula, J., Miller, J. D., & Sengupta, P. P. (2019). Network Tomography for Understanding Phenotypic Presentations in Aortic Stenosis. *JACC: Cardiovascular Imaging*, 12(2). <https://doi.org/10.1016/j.jcmg.2018.11.025>
- **Shrestha, S.**, & Sengupta, P. P. (2018a). Imaging Heart Failure With Artificial Intelligence. *Circulation: Cardiovascular Imaging*, 11(4), 1–2. <https://doi.org/10.1161/circimaging.118.007723>
- **Shrestha, S.**, & Sengupta, P. P. (2018b). The Mechanics of Machine Learning: From a Concept to Value. *Journal of the American Society of Echocardiography*, 31(12), 1285–1287. <https://doi.org/10.1016/j.echo.2018.10.003>
- **Shrestha, S.**, & Sengupta, P. P. (2018c). Imaging heart failure with artificial intelligence improving the realism of synthetic wisdom. *Circulation: Cardiovascular Imaging*, 11(4), e007723. <https://doi.org/10.1161/CIRCIMAGING.118.007723>
- **Shrestha, S.**, & Sengupta, P. P. (2018d). Machine learning for nuclear cardiology: The way forward. *Journal of Nuclear Cardiology*, 1–4. <https://doi.org/10.1007/s12350-018-1284-x>
- Tokodi, M., **Shrestha, S.**, Bianco, C., Kagiya, N., Casacang-Verzosa, G., Narula, J., & Sengupta, P. P. (2020). Interpatient Similarities in Cardiac Function: A Platform for

Personalized Cardiovascular Medicine. *JACC: Cardiovascular Imaging*, 13(5), 1119–1132.
<https://doi.org/10.1016/j.jcmg.2019.12.018>

- Magro, A., Magro, A., **Shrestha, S.**, & Brundage, K. (2018). Apoptotic Effects of Temozolomide and Naturopathic Agents upon Glioblastoma Cells. *Journal of Oncology Translational Research*, 04(02). <https://doi.org/10.4172/2476-2261.1000132>

Invited Talks

- Co-speaker on Transforming Leadership: development using NLP at the Analytics Frontiers Conference 2023, UNC Charlotte, NC to over 100 attendees in March 2023
- Invited by the Data Governance Council to talk on Ethics in AI at the Center for Creative Leadership in March 2023.
- Invited by Hitachi America to give a talk on Advances in Cardiac Imaging: Giving Heart to AI at Austin Area Echo Society in November 2019
- Invited to give a talk on The Rise and Relevance of Topological Data Analysis at the Center for Creative Leadership in October 2019.
- Invited virtual talk by United Services Automobile Association on Topological Data Analysis for Identifying Rare Events in Complex Data in October 2019.
- **Shrestha S**, Casclang-Verzosa G, Sengupta PP. Topological Data Analysis for Understanding Phenotypic Presentations in Aortic Stenosis: Isolating Phenotypic Trait using Network Tomography. July 2019. Symposium for Data Science and Statistics. Seattle, WA.
- Cho JS, Ashraf M, **Shrestha S**, Khalil M, Casclang-Verzosa G Abdul Ghaffar Y, et al. The Classification of Intracardiac Vortex Structure and Function Using the Patient Similarity Analysis. Mar 2019. ACC.19:
- The American College of Cardiology 68th Annual Scientific Sessions. New Orleans, LA.
- Cho JS, Ashraf M, **Shrestha S**, Khalil M, Casclang-Verzosa G, Abdul Ghaffar Y, et al. The Classification of Intracardiac Vortex Structure and Function Using the Patient Similarity Analysis. Mar 2019. WVU Medicine Echo Conference. Mar 2019.
- Invited to give a talk on Big Data and Hadoop: The future of Information Economy at the 45th Symposium on the Interface, Computer and Statistics with Data Science Theme in June 2015.
- **Shrestha S**. Big Data and Hadoop: Implications of Hadoop and High-Performance Computing in Data Analysis. Mar 2014. Invited at West Virginia University Department of Statistics.
- **Shrestha S**. Multiple Testing Procedure and Application to Genomics. Feb 2014. Invited at West Virginia University Department of Statistics.

Conference Presentations

- **Shrestha, S.**, Wormington, S. Young, S., Loignon, A. Dawkins, M. & Jeong, S. (2022). Understanding Leadership Challenges with Topological Data Analysis [Poster]. Society for Industrial and Organizational Psychology Annual Conference, Boston, MA, United States.

- Cho, J. S., Shrestha, S., Ashraf, M., Kagiya, N., Casacang-Verzosa, G., & Sengupta, P. P. (2020). The Association of the Flow Dissipative Energy Loss and Left Ventricular Function in Patients with Heart Failure. *Journal of the American Society of Echocardiography*, 33(6), B14. <https://doi.org/10.1016/j.echo.2020.04.015>
- Ghaffar, Y. A., **Shrestha, S.**, Shaukat, F., Osman, M., Kagiya, N., Alkhouli, M., Raybuck, B., Badhwar, V., & Sengupta, P. P. (2020). Incremental value of Novel Automated Machine Learning Platforms for Risk Stratification beyond STS risk scores in Patients Undergoing Transcatheter Aortic Valve Replacement. *Society for Cardiovascular Angiography & Intervention*, III-67.
- Alsaud, A., **Shrestha, S.**, Kadiyala, M., & Raina, S. (2020). PAPILLARY MUSCLE HYPERTROPHY MASQUERADING STEMI. *Journal of the American College of Cardiology*, 75(11, Supplement 1), 2547. [https://doi.org/10.1016/S0735-1097\(20\)33174-0](https://doi.org/10.1016/S0735-1097(20)33174-0)
- Amin, A. H., **Shrestha, S.**, Cook-Carney, T., Tokodi, M., Casacang-Verzosa, G., Ashraf, M., Moreland, J., Alkhouli, M., Raybuck, B., & Sengupta, P. P. (2018). Echocardiography Utilization as a Predictor of Inhospital Mortality in Acute Myocardial Infarction. *Journal of the American College of Cardiology*, 71(11), A1708. [https://doi.org/10.1016/S0735-1097\(18\)32249-6](https://doi.org/10.1016/S0735-1097(18)32249-6)
- Amin, A. H., **Shrestha, S.**, Tokodi, M., Ashraf, M., Verzosa, G., Amaki, M., Abe, H., & Sengupta, P. P. (2018). Semi-Automatic Classification of Cardiac Blood-Flow Fields Using Echocardiographic Particle Imaging Velocimetry Data. *Journal of the American College of Cardiology*, 71(11), A1659. [https://doi.org/10.1016/S0735-1097\(18\)32200-9](https://doi.org/10.1016/S0735-1097(18)32200-9)
- Ashraf, M., Ghaffar, Y. A., Virmani, C., Khalil, M. J., Hu, L., **Shrestha, S.**, Piccirilli, M., Bianco, C., & Sengupta, P. (2019). MACHINE LEARNING PREDICTED FILLING PRESSURES FROM LUNG DOPPLER SIGNALS (LDS) PROVIDE A NOVEL METHOD TO MONITOR PULMONARY CONGESTION IN CONGESTIVE HEART FAILURE PATIENTS. *Journal of the American College of Cardiology*, 73(9, Supplement 1), 715. [https://doi.org/10.1016/S0735-1097\(19\)31323-3](https://doi.org/10.1016/S0735-1097(19)31323-3)
- Banga, S., Osman, M., **Shrestha, S.**, Challa, A., Mehanni, M., Zeb, I., Sengupta, P., Balla, S., Kadiyala, M., Mills, J., Agrawal, P., & Hamirani, Y. S. (2020). META-ANALYSIS ON EFFICACY OF CARDIAC CT ANGIOGRAPHY VERSUS TRANSESOPHAGEAL ECHOCARDIOGRAPHY FOR FOLLOW UP IN PATIENTS POST LEFT ATRIAL APPENDAGE CLOSURE. *Journal of the American College of Cardiology*, 75(11, Supplement 1), 1803. [https://doi.org/10.1016/S0735-1097\(20\)32430-X](https://doi.org/10.1016/S0735-1097(20)32430-X)
- Cho, J. S., Ashraf, M., **Shrestha, S.**, Khalil, M., Casacang-Verzosa, G., Abdulghaffar, Y., Smith, C., & Sengupta, P. (2019). THE CLASSIFICATION OF INTRACARDIAC VORTEX STRUCTURE AND FUNCTION USING THE PATIENT SIMILARITY ANALYSIS. *Journal of the American College of Cardiology*, 73(9, Supplement 1), 1436. [https://doi.org/10.1016/S0735-1097\(19\)32042-X](https://doi.org/10.1016/S0735-1097(19)32042-X)
- Kagiya, N., Piccirilli, M., **Shrestha, S.**, Farjo, P., Tokodi, M., Casacang-Verzosa, G., Tarhuni, W., Nezarat, N., Budoff, M. J., Narula, J., & Sengupta, P. (2020). QUANTITATIVE PREDICTION OF MYOCARDIAL RELAXATION FROM SURFACE ELECTROCARDIOGRAM FOR DIAGNOSIS

OF LEFT VENTRICULAR DIASTOLIC DYSFUNCTION. Journal of the American College of Cardiology, 75(11, Supplement 1), 1070. [https://doi.org/10.1016/S0735-1097\(20\)31697-1](https://doi.org/10.1016/S0735-1097(20)31697-1)

- Kagiya, N., **Shrestha, S.**, Cho, J. S., Khalil, M., Singh, Y., Challa, A., Casacang-Verzosa, G., & Sengupta, P. P. (2020). ULTRASOUND TISSUE TEXTURE-BASED ANALYSIS OF MYOCARDIAL FIBROSIS: RADIOMICS AND MACHINE LEARNING APPROACH. Journal of the American College of Cardiology, 75(11, Supplement 1), 3564. [https://doi.org/10.1016/S0735-1097\(20\)34191-7](https://doi.org/10.1016/S0735-1097(20)34191-7)
- Kawsara, M. A., Alqahtani, F., Alhajji, M., **Shrestha, S.**, Ziada, K., & Alkhouli, M. A. (2020). BALLOON AORTIC VALVULOPLASTY AS A BRIDGE TO AORTIC VALVE REPLACEMENT A CONTEMPORARY NATIONAL PERSPECTIVE. Journal of the American College of Cardiology, 75(11, Supplement 1), 1180. [https://doi.org/10.1016/S0735-1097\(20\)31807-6](https://doi.org/10.1016/S0735-1097(20)31807-6)
- Kietrsunthorn, P., Petla, V., Piccirilli, M., **Shrestha, S.**, Amin, A. H., & Sengupta, P. (2019). Acute Coronary Syndromes in Young Adults: Application Of Bayesian Network Analysis For Dynamic Causal Modeling. Journal of the American College of Cardiology, 73(9, Supplement 1), 215. [https://doi.org/10.1016/S0735-1097\(19\)30823-X](https://doi.org/10.1016/S0735-1097(19)30823-X)
- Patel, K., Tokodi, M., Sengupta, P. P., Runkana, A., **Shrestha, S.**, Sokos, G., Caccamo, M., & Mills, J. (2018). Implementing Machine Learning Algorithm to Identify Patients At Risk of Developing Elevated Left Sided Cardiac Filling Pressures. Journal of the American College of Cardiology, 71(11), A727. [https://doi.org/10.1016/S0735-1097\(18\)31268-3](https://doi.org/10.1016/S0735-1097(18)31268-3)
- Raina, S., **Shrestha, S.**, Ambesh, P., Garloch, K., Bhirud, A., Modi, S., Edmond, A., Alkhouli, M., Badhwar, V., & Sengupta, P. (2019). Functional Outcomes Of Cardiac Rehabilitation: Weighing In The Obesity Paradox. Journal of the American College of Cardiology, 73(9, Supplement 1), 1731. [https://doi.org/10.1016/S0735-1097\(19\)32337-X](https://doi.org/10.1016/S0735-1097(19)32337-X)
- **Shrestha, S.**, Cho, J. S., Kagiya, N., Casacang-Verzosa, G., & Sengupta, P. (2020). A Network-Based Approach for Discovering Patient Phenotypes from High-Throughput Cardiac Imaging Data. Journal of the American College of Cardiology, 75(11, Supplement 1), 1780. [https://doi.org/10.1016/S0735-1097\(20\)32407-4](https://doi.org/10.1016/S0735-1097(20)32407-4)
- Tokodi, M., Farjo, P., Piccirilli, M., **Shrestha, S.**, & Sengupta, P. (2019). Phenotypic Patterns of Left Ventricular Diastolic Function Identified Using Clustering Approaches. Journal of the American College of Cardiology, 73(9, Supplement 1), 1515. [https://doi.org/10.1016/S0735-1097\(19\)32121-7](https://doi.org/10.1016/S0735-1097(19)32121-7)
- Tokodi, M., Schwertner, W., Perge, P., Kosztin, A., Lakatos, B., **Shrestha, S.**, Kovacs, A., & Merkely, B. (2018). Unsupervised Machine Learning Algorithm to Identify High and Low Risk Patients Following CRT Implantation. Journal of the American College of Cardiology, 71(11), A947. [https://doi.org/10.1016/S0735-1097\(18\)31488-8](https://doi.org/10.1016/S0735-1097(18)31488-8)
- Tokodi, M., **Shrestha, S.**, Ashraf, M., Casacang-Verzosa, G., & Sengupta, P. (2019). Topological Data Analysis for Quantifying Inter-Patient Similarities in Cardiac Function. Journal of the American College of Cardiology, 73(9, Supplement 1), 751. [https://doi.org/10.1016/S0735-1097\(19\)31359-2](https://doi.org/10.1016/S0735-1097(19)31359-2)

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