



# CURRICULUM VITAE – SHIVANAND VENKANNA SHESHAPPANAVAR

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PERSONAL INFORMATION	18 Marvin Dr, Apt C8, Newark, DE 19713. ssheshap@udel.edu, 315-882-9277, <a href="https://sheshap.github.io/">https://sheshap.github.io/</a>   																
RESEARCH INTERESTS	Computer Vision, Deep Learning, Point Cloud Analysis, Object Recognition, Human Activity Recognition, and Mesh Analysis.																
EDUCATION	<table><tr><td><b>Doctor of Philosophy in Computer and Information Science.</b></td><td><b>April 2023</b></td></tr><tr><td>University of Delaware (UD), Newark, Delaware, USA.</td><td>3.89 gpa</td></tr><tr><td><b>Master of Science in Computer Science.</b></td><td><b>May 2018</b></td></tr><tr><td>Syracuse University (SU), Syracuse, New York, USA.</td><td>3.67 gpa</td></tr><tr><td><b>Master of Technology in Computer Science and Engineering.</b></td><td><b>August 2012</b></td></tr><tr><td>Visvesvaraya Technological University, India.</td><td>76%</td></tr><tr><td><b>Bachelor of Engineering in Computer Science and Engineering.</b></td><td><b>June 2009</b></td></tr><tr><td>Visvesvaraya Technological University, India.</td><td>69.5%</td></tr></table>	<b>Doctor of Philosophy in Computer and Information Science.</b>	<b>April 2023</b>	University of Delaware (UD), Newark, Delaware, USA.	3.89 gpa	<b>Master of Science in Computer Science.</b>	<b>May 2018</b>	Syracuse University (SU), Syracuse, New York, USA.	3.67 gpa	<b>Master of Technology in Computer Science and Engineering.</b>	<b>August 2012</b>	Visvesvaraya Technological University, India.	76%	<b>Bachelor of Engineering in Computer Science and Engineering.</b>	<b>June 2009</b>	Visvesvaraya Technological University, India.	69.5%
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PHD THESIS	“Learning from Neighborhoods for 3D Point Cloud Classification” Defense : April 2023 Advisor : Dr. Chandra Kambhamettu. Committee : Dr. Christopher Rasmussen, Dr. Li Liao, Dr. Vu Dinh (Mathematical Sciences).																
UNDER REVIEW	<b>Sheshappanavar, Shivanand Venkanna</b> , Yufan Wang, & Chandra Kambhamettu. “3DGrocery100 : A large benchmark 3D dataset for grocery recognition”, <i>IEEE Transactions on Multimedia</i> , <b>IF 7.27</b> .  <b>Sheshappanavar, Shivanand Venkanna</b> , & Chandra Kambhamettu. “Local Neighborhood Features for 3D Classification”, Submitted to a Conference, <b>IF 1.90</b> . 																
UNDER PREPARATION	<b>Sheshappanavar, Shivanand Venkanna</b> , and Chandra Kambhamettu. “Revisiting Human Activity Recognition in Point Cloud Sequences”, Intended venue : <i>ACM Multimedia Systems Conference 2023 (MMSys)</i> , <b>IF 2.81</b> .  <b>Sheshappanavar, Shivanand Venkanna</b> , and Chandra Kambhamettu. “3DGroceryFormer : A novel Point Cloud Transformer for 3D Grocery Classification”, Intended venue : <i>IEEE/CVF International Conference on Computer Vision 2023 (ICCV)</i> , <b>IF 21.94</b> .																
ACCEPTED PUBLICATIONS	<b>Sheshappanavar, Shivanand Venkanna</b> , Vinit Veerendraveer Singh, and Chandra Kambhamettu. “PatchAugment : Local Neighborhood Augmentation in Point Cloud Classification.” <i>Proceedings of the IEEE/CVF International Conference on Computer Vision Workshops</i> . 2021. (Acceptance rate 30-40%),  ,  .  <b>Sheshappanavar, Shivanand Venkanna</b> , and Chandra Kambhamettu. “Dynamic local geometry capture in 3d point cloud classification.” 2021 <i>IEEE 4th International Conference on Multimedia Information Processing and Retrieval (MIPR)</i> . IEEE, 2021. (Acceptance rate 20%),  ,  , <b>IF 2.90</b> .  Singh, Vinit Veerendraveer, <b>Shivanand Venkanna Sheshappanavar</b> , and Chandra Kambhamettu. “MeshNet++ : A Network with a Face.” <i>Proceedings of the 29th ACM International Conference on Multimedia</i> . 2021. (Acceptance rate 9% Oral),  ,  , <b>IF 3.144</b> .  Singh, Vinit Veerendraveer, <b>Shivanand Venkanna Sheshappanavar</b> , and Chandra Kambhamettu. “Mesh Classification with Dilated Mesh Convolutions”. 2021 <i>IEEE International Conference on Image Processing (ICIP)</i> . IEEE, 2021. (Acceptance rate 46%),  ,  , <b>IF 7.50</b> .  <b>Sheshappanavar, Shivanand Venkanna</b> , and Chandra Kambhamettu. “A novel local geometry capture in PointNet++ for 3D classification”. <i>Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops</i> . 2020. (Acceptance rate 30-40%),  ,  .																
REFEREED SHORT PAPER	<b>Sheshappanavar, Shivanand Venkanna</b> , and Chandra Kambhamettu. “SimpleView++ : Neighborhood Views for Point Cloud Classification” 2022 <i>IEEE 5th International Conference on Multimedia Information Processing and Retrieval (MIPR)</i> . IEEE, 2022. (Acceptance rate 20%),  ,  , <b>IF 2.90</b> .																

OTHER ACCEPTED PUBLICATIONS	<b>Sheshappanavar, Shivanand Venkanna</b> , and Mohan Chilukuri. “LSTM based Soil Moisture Prediction”, <i>Proceedings of the North Eastern Regional Conference on Complex Systems (NERCCS)</i> - 2018, <a href="#">Q</a> , <a href="#">B</a> .	
	Manish Verma, <b>Shivanand Venkanna Sheshappanavar</b> . “HoS : A metric driven approach to measure Quality/Health of Silicon”, 2nd Runner up, iTech Days 2012, Infineon Technologies India Pvt Ltd, Bengaluru. (Acceptance rate <b>29%</b> , <b>Awarded third prize</b> ).	
PROGRAM COMMITTEE	Serving on the Program Committee of <i>First Workshop on Security and Privacy for Immersive Virtual Worlds (Secure Immersive Worlds)</i> - co-located with <a href="#">IEEE VR Conference</a> .	25-29 March 2023
JOURNAL REVIEWER	IEEE Robotic Automation Letters 2022. Pattern Recognition 2022.	
CONFERENCE REVIEWER	IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2023, 2022, European Conference on Computer Vision (ECCV) 2022, IEEE International Conference on Pattern Recognition (ICPR) 2022.	
SUB-REVIEWER	IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) - 2021, 2020, 2019. IEEE International Conference on Automatic Face & Gesture Recognition (FG) - 2021, 2019. ACM International Conference on Multimedia (ACM MMM) - 2021, 2020. European Conference on Computer Vision (ECCV) 2020.	
TEACHING EXPERIENCE	<b>Instructor</b> of CISC 210 Introduction to Systems Programming - Class strength : 43, Class duration : 10 weeks, Course Evaluation <b>4.14/5.0</b> . - composed a 300+ questions repository on moodle for online quizzes. - two lectures a week, daily office hours, grading and supervised weekly lab sessions.	Summer 2020
TEACHING ASSISTANT	CISC 220 Data Structures Fall 2021 - Proctoring, three weekly lab sessions, grading, weekly office hours. CISC 210 Intro to Systems Programming (Spring'19, Fall'19, Spring'20, Fall'20, Spring'21, Fall'22). - Lead TA ; coordinating and delegating work to 4 graduate TAs and ten undergrads TAs - Proctoring, grading, handling weekly lab sessions, weekly office hours. CISC 101 Principles of Computing (Winter'21) - Office hours, Grading, Lab sessions supervision. CISC 361 Computer Architecture (Fall'18). - Proctoring, grading, weekly office hours, taught two lectures. CIS 700 Machine Learning Methods in Security (Spring'17) - Grading assignments.	
RESEARCH ASSISTANT	<b>Research Assistant, University of Delaware.</b> Video/Image Modeling and Synthesis (VIMS) Lab. Dept. of Computer and Information Sciences.	Summer (2019, 2021 & 2022)
	<b>Graduate Research Assistant, Syracuse University.</b> Research Assistantship, Dept of EECS, Syracuse University, Syracuse, NY, USA.	August 2016 - May 2018
PROFESSIONAL EXPERIENCE	<b>IT Consultant - Oracle India Private Limited, Bengaluru.</b> - Implemented Oracle Fusion and EBS R12 Applications and worked dedicatedly at client location (Alcoa, Pittsburgh, PA, May-Oct 2014) during the testing of the product (pre, during, post-go-live). - Key contributor to formulating the process of knowledge transition for ITG tool at Alcoa inc. - Worked closely and developed Strong working relationships with Oracle's key accounts, such as Alcoa Inc., British Telecom., Red Robin Restaurants, First America, Blackrock, Financial Corp., Church Pension, and Land O Lakes. - Automation, Patching, Backups, Bounces, Deployments, BI Reporting, Migrations, Cloning, Upgrades, Data fixes, Data Masking, Periodic Prod password change, and auditing. - Training : UNIX Fundamentals, SQL/PLSQL, Oracle Database 11g Admin Workshop I and II.	October 2012 - June 2016
	<b>Intern - Infineon Technologies Private Ltd, Bengaluru.</b> - Built a metric-based Post-Silicon Validation tracking system (coverage information). - Developed Automation scripts across teams and resolved issues for a specific tool.	July 2011 - May 2012

SKILLS	<p><b>Key Concepts</b> : Linear Algebra, Optimizations, Computer Vision, Neural Networks</p> <p><b>Programming Languages</b> : Python, C, C++, CUDA</p> <p><b>Deep Learning Frameworks</b> : PyTorch, PyTorch3D, TensorFlow, Keras, PyTorch-Geometric</p> <p><b>Computer Vision Libraries</b> : OpenCV, MATLAB, Open3D, Scikit-learn, Numpy, Matplotlib</p> <p><b>Database and Cloud Technologies</b> : Oracle, MySQL, SQL, AWS(Ubuntu)</p> <p><b>Tools</b> : MeshLab, LabelMe, Visual Studio, RStudio, MATLAB, PyCharm, XCode, Git, LaTeX</p>
AWARDS & HONORS	<p><b>Best Teaching Assistant Award</b> (2020-2021), Dept. of CIS, University of Delaware. \$500</p> <p><b>Third Prize</b> - iTech Days, Infineon India Private Limited, Bengaluru, May 2012. INR 10,000</p> <p><b>Top 5% Scorer</b>, Scored 95%tile in Graduate Aptitude Test in Engineering (Computer Science), organized by the Indian Institute of Technology (IIT). April 2010</p>
RELEVANT COURSEWORK	<p><b>University of Delaware</b></p> <p>CISC 642 Computer Graphics (Spring 2021),</p> <p>CISC 889 Neural Networks and Deep Learning (Spring 2020),</p> <p>CISC 849 Robot Vision and Learning (Fall 2019),</p> <p>ELEG 667 Convex Optimization (Fall 2019),</p> <p>MATH 637 Math Techniques for DS(Spring 2019),</p> <p>CISC 640 Introduction to Computer Vision (Fall 2018),</p> <p><b>Coursera</b></p> <p>Neural Networks and Deep Learning (Coursera/DeepLearning.AI - Summer/Fall 2018),</p> <p>Structuring Machine Learning Projects (Coursera/DeepLearning.AI - Summer/Fall 2018),</p> <p>Improving Deep Neural Networks : Hyperparameter Tuning, Regularization and Optimization (Coursera/DeepLearning.AI - Summer/Fall 2018),</p> <p><b>Syracuse University</b></p> <p>CIS 700 Advances in Deep Learning (Spring 2018),</p> <p>CIS 731 Artificial Neural Networks (Fall 2017)</p> <p>CIS 700 ML Methods in Security (Spring 2017),</p> <p>CIS 700 Structure of Complex Networks (Spring 2017)</p>
DEPARTMENT SERVICES	<p>SIGVIS/GRAPHICS - Spring 2019, Fall 2019, Spring 2020, Fall 2020, and Spring 2021.</p> <p>- Co-ordinated and managed the schedule for the weekly Special Interest Group (SIG) colloquium on Computer Vision and Graphics in the Dept. of CIS, University of Delaware.</p>
MENTORING	<p>Group creator and admin to Facebook Group <a href="#">PhDinUS</a> - over 28k members</p> <p>- mentoring PhD aspirants around the world (evaluating profiles, SOP, faculty/university matching).</p> <p>- assisting newly joined Assistant Professors in recruiting PhD students.</p>
TALKS OR PRESENTATIONS	<p>MIPR Conference 2022 - <a href="#">SimpleView++</a> :Neighborhood Views for Point Cloud Classification (8/4/22)</p> <p><a href="#">PhD Proposal Defense</a> - Learning from Neighborhoods for 3D Point Cloud Classification (2/11/22)</p> <p>ICCV Workshop 2021 - Deep Learning for Geometric Computing - on <a href="#">PatchAugment</a> (10/16/21)</p> <p>MIPR Conference 2021 - on <a href="#">Dynamic local geometry</a> capture in 3D point cloud classification (9/9/21)</p> <p>SIGVIS/GRAPHICS Fall 2021 - Two talks - on P4Transformer (10/13/21) and PSTNet (10/20/21)</p> <p>Deep Robust &amp; Explainable AI Lab Reading Group - on <a href="#">P4Transformer</a> (11/10/21)</p> <p>CVPR Workshop 2020 - Deep Learning for Geometric Computing - on Ellipsoid Querying (6/13/20)</p> <p>SIGVIS/GRAPHICS Spring 2020 - on Relation-Shape CNN (4/6/20)</p> <p>PhD Research Prelim Presentation - Ellipsoid Querying (5/17/20)</p> <p>SIGVIS/GRAPHICS Fall 2020 - <a href="#">Convolution in the cloud</a> (10/21/20)</p> <p>SIGVIS/GRAPHICS Fall 2018 - Two talks - on PointNet (10/31/18) and PointNet++ (11/14/18)</p>
REFERENCES	<p><a href="#">Dr. Chandra Kambhamettu</a> (PhD Advisor - chandrak@udel.edu),</p> <p><a href="#">Dr. Chilukuri K. Mohan</a> (ckmohan@syr.edu).</p> <p><a href="#">Dr. Sunita Chandrasekaran</a> (schandra@udel.edu).</p> <p><a href="#">Dr. Andrew Roosen</a> (roosen@udel.edu),</p>