

EDUCATION	University Of Massachusetts, Amherst , (Ph.D. - CS) Columbia University, NewYork , (M.S., CS)	<i>Jan 2018 - Dec 2024</i> <i>Sep 2011 - Dec 2012</i>
PUBLICATIONS	Conference <ul style="list-style-type: none">• BuildingNet: Learning to Label 3D Buildings: Pratheba Selvaraju, Mohamed Nabail, Evangelos Kalogerakis, Siddhartha Chaudhuri. (ICCV Oral -2021)• Developable Approximation of Neural Implicits via Rank Minimization: Pratheba Selvaraju. (International conference on 3D Vision (3DV-2024)) .• OFER: Occluded Face Expression Reconstruction: Pratheba Selvaraju, Victoria Fernandez Abrevaya, Timo Bolkart, Rick Akkerman, Tianyu Ding, Faezeh Amzadi, Ilya Zharkov. (CVPR - 2025)• FORA: Fast-Forward Caching in Diffusion Transformer Acceleration: Pratheba Selvaraju, Tianyu Ding, Tianyi Chen, Ilya Zharkov, Luming Liang. (arXiv, Towards conference submission) Journal <ul style="list-style-type: none">• A 3D digitisation workflow for architecture-specific annotation of built heritage: Marisia Deligiorgi, Maria I Maslioukova, Melinos Averkiou, Andreas C Andreou, Pratheba Selvaraju, Evangelos Kalogerakis, Gustavo Patow, Yiorgos Chrysanthou, George Artopoulos .(JASREC -2021)	
RESEARCH EXPERIENCE	MPI - Perceived Systems , Tübingen, Germany (Research Assistant) AccessoryAdaption from human to non-humanoid. Roblox Corporation , San Mateo, CA (Research Intern) <ul style="list-style-type: none">• AccessoryAdaption for morphologically different avatars: Deforming and adapting a garment from a human to non-humanoid characters with no specified correspondence mapping. (Towards conference submission) Microsoft - Applied Science Group , Redmond, WA (Research Intern) <ul style="list-style-type: none">• OFER: Occluded Face Expression Reconstruction, a diffusion based generative model incorporating ranking mechanism to select optimal samples• FORA: Fast-Forward caching in Diffusion Transformer Acceleration, a faster sampling mechanism for diffusion based transformer network Google , Redmond, WA (Applied research Intern) <ul style="list-style-type: none">• Worked on LiDAR building semantic labelling of parts and reconstruction• Conducted experiments on real google street view lidar data to extract window positions to be used for training for part label segmentation• Experiments to reconstruct the open surfaces (buildings) Facebook Reality Labs , Redmond, WA (Research Intern) <ul style="list-style-type: none">• Worked on virtual panel placement in synthetic room view in augmented reality setup• Conducted experiments for better placement of the panel with respect to head positions dealing with occlusions and scale of the panel	<i>Feb 2025 – current</i> <i>June 2024 – Dec 2024</i> <i>Sep 2022 – Dec 2022</i> <i>Jun 2022 - Aug 2022</i> <i>May 2020 - Sep 2020</i>
ENGINEERING EXPERIENCE	IMO, USA (Software Engineer) Audio quality improvement of the IMO application by suppression of voice interruption and echo. Machine Zone, USA (Software Engineer) Art tool development for production of game assets using shader programming and 3D graphics Microsoft, USA (Software Engineer) Full stack developer in Skype for business	<i>Mar 2017 – Dec 2017</i> <i>Sep 2016 – Jan 2017</i> <i>Apr 2013 – Aug 2016</i>
TECHNICAL SKILLS	Python, C++, Pytorch, OpenGL, node4j, Blender 3D Computer Vision , 3D Computer Graphics , 3D reconstruction , Dataset Generation , Diffusion Generative modeling , Implicit reconstruction , Fast transformer , Geometry Processing , Knowledge Graph , Dataset creation	

COURSES

Coursera

- Generative AI with Large Language Models (LLMs).

PORTFOLIO

CV-Personal Webpage(pratheba.github.io)

LinkedIn([prathebaselvaraju](#))

REFEREES

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Victoria Fernandez Abrevaya, (Max Planck Institute for Intelligent Systems: Perceived Systems)

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Luming Liang, (Microsoft Research)

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Tianyu Ding, (Microsoft Research)

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