Pratheba Selvaraju — pselvaraju@umass.edu — +1 646 725 1109

EDUCATION

University Of Massachusetts, Amherst, (Ph.D. - CS)

Jan 2018 - current
Columbia University, NewYork, (M.S., CS)

Sep 2011 - Dec 2012
PSG College of Technology, India, (B.E., IT)

Aug 2005 - Jun 2009

Publications

Conference

- 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. (Accepted International conference on 3D Vision (3DV-2024)) .
- OFER: Occluded Face Expression Reconstruction and Ranking: Pratheba, Selvaraju, Victoria Abrevaya, Timo Bolkart, Evangelos Kalogerakis, Faezeh Amzadi, Ilya Zharkov.

 (Under submission Conference)

Journal

• A 3D digitisation workflow for architecture-specific annotation of built heritage: Marissia Deligiorgi, Maria I Maslioukova, Melinos Averkiou, Andreas C Andreou, **Pratheba Selvaraju**, Evangelos Kalogerakis, Gustavo Patow, Yiorgos Chrysanthou, George Artopoulos .(JASREC -2021)

Current Projects

- Occluded face conditional expression generation: Pratheba, Selvaraju, Victoria Abrevaya,
 Timo Bolkart
- High detailed 3D animatable face generation from single view images: Pratheba, Selvaraju, Timo Bolkart, Victoria Abrevaya, Evangelos Kalogerakis

RESEARCH Internship

Microsoft - Applied Science Group, Redmond, WA

Sep 2022 – Dec 2022

• OFER: Occluded Face Expression Reconstruction and Ranking

Google, Redmond, WA

Jun 2022 - Aug 2022

- \bullet 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

May 2020 - Sep 2020

- 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

Professional Experience

IMO, USA (Software Engineer)

Mar 2017 – Dec 2017

Audio quality improvement of the IMO application by suppression of voice interruption and echo.

Machine Zone, USA (Software Engineer)

Sep 2016 – Jan 2017

Art tool development for production of game assets using shader programming and 3D graphics

Microsoft, USA (Software Engineer)

Apr 2013 - Aug 2016

Full stack developer in Skype for business

Amazon, USA (Software Development Intern)

May 2012 - Aug 2012

EMC Corporation(RSA), India (Software Engineer)

Aug 2009 - July 2011

TECHNICAL SKILLS Python, C++, Pytorch, OpenGL

3D Computer Vision, 3D Computer Graphics

PORTFOLIO CV-Personal Webpage(pratheba.github.io)

LinkedIn(prathebaselvaraju)

Github

univGithub (prathebaselva)

REFEREES Timo Bolkart, (Google Research)

Email: timo.bolkart@tuebingen.mpg.de

Ilya Zharkov, (Microsoft Research)
Email: zharkov@microsoft.com

 ${\bf Evangelos} \ {\bf Kalogerakis}, ({\tt University} \ {\tt of} \ {\tt Massachusetts}, \ {\tt Amherst})$

Email: kalo@cs.umass.edu