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Employment History

- 2021 – till now **Associate Professor**, LTCI - Telecom Paris, Institut Polytechnique de Paris
- 2020 – 2021 **Research Associate**, CGV Group, TU Delft, Advisor: Prof. Elmar Eisemann
- 2019 – 2020 **Assistant Professor**, Computer Science, Indian Institute of Technology Guwahati
- 2019 **Post-doctoral Fellow**, LIX - Ecole Polytechnique, Advisor: Prof. Marie-Paule Cani
- 2018 – 2019 **Institute Pre-doctoral Fellow**, AGCL - Indian Institute of Technology Madras, Advisor: Prof. Ramanathan Muthuganapathy
- 2018 **Research Intern**, LIX - Ecole Polytechnique, Advisor: Prof. Marie-Paule Cani
- 2016 **International internship student trainee**, University of Tokyo, Advisor- Prof. Takeo Igarashi

Education

- 2014 – 2018 **Ph.D.**, Indian Institute of Technology Madras
Thesis title: *Delaunay-triangulation based algorithms for sketching*
Institute Research Award 2018
- 2012 – 2014 **M.Tech. Computer Science**, Mahatma Gandhi University
University First rank
- 2008 – 2012 **B.Tech. Computer Science**, University of Calicut
First class with honors

Student Supervision

- 2024-2027 **Antonin WATTEL** Institut Polytechnique de Paris
PhD thesis director
with Marie-Paule CANI (LIX)
- 2023-2026 **Anandhu SURESHKUMAR** Institut Polytechnique de Paris
PhD thesis co-supervisor
with Marie-Paule CANI (LIX) and Stefanie HAHMANN (University of Grenoble)
- 2022-2025 **Tara BUTLER** Institut Polytechnique de Paris
PhD thesis co-supervisor
with Marie-Paule CANI (LIX) and Pascal GUEHL (LIX)
- 2023 **Hari Hara Gowtham JETTI & Anandhu SURESHKUMAR** Institut Polytechnique de Paris
Master thesis supervisor
- 2023 **Jackson SUNNY** Ecole Polytechnique
M1 internship supervisor

Research Publications

Journal Articles

- 1 A. D. Parakkat, S. Ohrhallinger, E. Eisemann, and P. Memari, "Ballmerge: High-quality surface reconstruction via voronoi balls," *Computer Graphics Forum (to appear)*, 2024.
- 2 M. Matusovic, A. D. Parakkat, and E. Eisemann, "Interactive depixelization of pixel art through spring simulation," *Computer Graphics Forum*, vol. 42, no. 2, pp. 51–60, 2023.
- 3 A. D. Parakkat, P. Memari, and M.-P. Cani, "Delaunay painting: Perceptual image colouring from raster contours with gaps," *Computer Graphics Forum*, vol. 41, no. 6, pp. 166–181, 2022.
- 4 S. Ohrhallinger, J. Peethambaran, A. D. Parakkat, T. K. Dey, and R. Muthuganapathy, "2d points curve reconstruction survey and benchmark," *Computer Graphics Forum*, vol. 40, no. 2, pp. 611–632, 2021.
- 5 A. D. Parakkat, H. H. Gowtham, S. Joshi, and R. Muthuganapathy, "A digital assistant for shading paper sketches," *Visual Computing for Industry, Biomedicine, and Art*, vol. 3, no. 1, pp. 1–16, 2020.
- 6 S. B. Thayyil, A. D. Parakkat, and R. Muthuganapathy, "An input-independent single pass algorithm for reconstruction from dot patterns and boundary samples," *Computer Aided Geometric Design*, vol. 80, p. 101 879, 2020.
- 7 E. Entem, A. D. Parakkat, L. Barthe, R. Muthuganapathy, and M.-P. Cani, "Automatic structuring of organic shapes from a single drawing," *Computers & Graphics*, vol. 81, pp. 125–139, 2019.
- 8 J. Peethambaran, A. D. Parakkat, A. Tagliasacchi, R. Wang, and R. Muthuganapathy, "Incremental labelling of voronoi vertices for shape reconstruction," *Computer Graphics Forum*, vol. 38, no. 1, pp. 521–536, 2019.
- 9 A. D. Parakkat, S. Methirumangalath, and R. Muthuganapathy, "Peeling the longest: A simple generalized curve reconstruction algorithm," *Computers & Graphics*, vol. 74, pp. 191–201, 2018.
- 10 A. D. Parakkat, U. B. Pundarikaksha, and R. Muthuganapathy, "A delaunay triangulation based approach for cleaning rough sketches," *Computers & Graphics*, vol. 74, pp. 171–181, 2018.
- 11 S. Methirumangalath, S. S. Kannan, A. D. Parakkat, and R. Muthuganapathy, "Hole detection in a planar point set: An empty disk approach," *Computers & Graphics*, vol. 66, pp. 124–134, 2017.
- 12 A. D. Parakkat and R. Muthuganapathy, "Crawl through neighbors: A simple curve reconstruction algorithm," *Computer Graphics Forum*, vol. 35, no. 5, pp. 177–186, 2016.
- 13 J. Peethambaran, A. D. Parakkat, and R. Muthuganapathy, "An empirical study on randomized optimal area polygonization of planar point sets," *Journal of Experimental Algorithmics (JEA)*, vol. 21, pp. 1–24, 2016.
- 14 S. Methirumangalath, A. D. Parakkat, and R. Muthuganapathy, "A unified approach towards reconstruction of a planar point set," *Computers & Graphics*, vol. 51, pp. 90–97, 2015.
- 15 A. D. Parakkat, J. Peethambaran, P. Joseph, and R. Muthuganapathy, "A graph-based geometric approach to contour extraction from noisy binary images," *Computer-Aided Design and Applications*, vol. 12, no. 4, pp. 403–413, 2015.
- 16 J. Peethambaran, A. D. Parakkat, and R. Muthuganapathy, "A randomized approach to volume constrained polyhedronization problem," *Journal of Computing and Information Science in Engineering*, vol. 15, no. 1, p. 011 009, 2015.

Conference Proceedings

- 1 X. Gong, A. D. Parakkat, and D. Rohmer, "Collision free simplification for 2d multi-layered shapes," in *International Conference on Interactive Media, Smart Systems and Emerging Technologies*, 2023.

- 2 H. H. Gowtham, **A. D. Parakkat**, and M.-P. Cani, "Pointcloudslicer: Gesture-based segmentation of point clouds," in *44th Annual Conference of the European Association for Computer Graphics (EUROGRAPHICS 2023)*, 2023.
- 3 C. d. MALEFETTE, A. Qi, **A. D. Parakkat**, M.-P. Cani, and T. Igarashi, "Perfectdart: Automatic dart design for garment fitting," in *SIGGRAPH Asia Technical Brief*, 2023.
- 4 S. Ohrhallinger, **A. D. Parakkat**, and P. Memari, "Feature-sized sampling for vector line art," in *Pacific Graphics*, 2023.
- 5 S. Ohrhallinger, **A. D. Parakkat**, and J. Peethambaran, "Shape reconstruction in 2d: From theory to practice," in *Eurographics 2022-Tutorial*, 2022.
- 6 **A. D. Parakkat**, M.-P. R. Cani, and K. Singh, "Color by numbers: Interactive structuring and vectorization of sketch imagery," in *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*, 2021, pp. 1–11.
- 7 **A. D. Parakkat**, P. Madipally, H. H. Gowtham, and M.-P. Cani, "Interactive flat coloring of minimalist neat sketches," in *Eurographics 2020 short paper proceedings*, 2020.
- 8 **A. D. Parakkat**, P. Memari, and M.-P. Cani, "Layered reconstruction of stippling art," in *ACM SIGGRAPH 2019 Posters*, 2019, pp. 1–2.
- 9 E. Entem, **A. D. Parakkat**, M.-P. Cani, and L. Barthe, "Structuring and layering contour drawings of organic shapes," in *Proceedings of the Joint Symposium on Computational Aesthetics and Sketch-Based Interfaces and Modeling and Non-Photorealistic Animation and Rendering*, 2018, pp. 1–14.
- 10 S. Methirumangalath, **A. D. Parakkat**, S. S. Kannan, and R. Muthuganapathy, "Reconstruction using a simple triangle removal approach," in *SIGGRAPH Asia 2017 Technical Briefs*, 2017, pp. 1–4.
- 11 **A. D. Parakkat**, S. A. Joshi, U. B. Pundarikaksha, and R. Muthuganapathy, "Sketch and shade: An interactive assistant for sketching and shading," in *Proceedings of the Symposium on Non-Photorealistic Animation and Rendering*, 2017, pp. 1–2.

Awards & Recognitions

- 🏆 ANR Jeunes Chercheuses et Jeunes Chercheurs grant 2023
- 🏆 Institute Research Award of IIT Madras 2018
- 🏆 Best paper award - SIGGRAPH Asia Technical Briefs 2023
- 🏆 Best paper award (Honorable mention) - Shape Modeling International 2018
- 🏆 Reproducibility stamp award - Shape Modeling International 2018
- 🏆 Reproducibility stamp award during International Geometry Summit 2016
- 🏆 First Rank for M.Tech from Mahatma Gandhi University

Services to the community

Chairing International Conferences

- 🏆 Industrial track Co-chair - Eurographics 2024
- 🏆 Conference Co-chair (Short papers, Posters and Work-in-progress) - Pacific Graphics 2022

International Program Committee Member (not exhaustive)

- 🏆 Eurographics 2024
- 🏆 Pacific Graphics 2022-23

Services to the community (continued)

- 📖 SIGGRAPH Asia 2022-23 (Technical Briefs & Posters)
- 📖 Shape Modeling International 2020-23
- 📖 Computer Graphics International 2020-23

Technical Paper Reviewer (not exhaustive)

- 📖 SIGGRAPH, SIGGRAPH Asia technical papers
- 📖 Wiley Computer Graphics Forum
- 📖 Elsevier Pattern Recognition
- 📖 Elsevier Computers & Graphics
- 📖 Elsevier Computer-Aided Design
- 📖 Springer Visual Computer
- 📖 Springer Acta Informatica

Thesis Committee

- 📖 Ali Fakhri, 2023 - Universite de Strasbourg

References

Available on Request