Stanford

Barathi Subramanian

Postdoctoral Scholar, Pathology

Curriculum Vitae available Online Resume available Online

Bio

BIO

I am a Postdoctoral Scholar in the Department of Pathology and the Center for AI in Medicine & Imaging at Stanford University. My research focuses on computational pathology, medical AI, and computer vision, with emphasis on whole-slide image analysis, artifact-aware preprocessing, tissue classification, segmentation, survival prediction, and multimodal pathology foundation models.

I develop end-to-end AI pipelines for digital pathology, including whole-slide image preprocessing, tile extraction, quality control, annotation workflows, foundation-model-based feature extraction, and clinically relevant downstream prediction tasks.

Before joining Stanford, I completed my Ph.D. in Computer Vision at Kyungpook National University, South Korea, where I worked on anomaly detection, object detection, gesture recognition, and real-time computer vision systems. My broader goal is to build reliable, interpretable, and clinically useful AI systems for pathology and healthcare.

HONORS AND AWARDS

- Charles B. Carrington Memorial Award, Stanford University (2025)
- Best Thesis Award, Kyungpook National University (2024)

PROFESSIONAL EDUCATION

- Bachelor of Science, Kyungpook National University (2014)
- Master of Science, Kyungpook National University (2015)
- Master of Science, Bharathiar University (2015)
- Bachelor of Science, Bharathiar University (2014)
- Doctor of Philosophy, Kyungpook National University (2024)
- Ph.D, Kyungpook National University , Computer Science (Computer Vision) (2024)
- Master degree, Bharathiar University , Applied Mathematics with Computer Applications (2015)
- Undergraduate degree, Bharathiar University , Applied Mathematics with Computer Application (2013)

STANFORD ADVISORS

- Jeanne Shen, Postdoctoral Faculty Sponsor

LINKS

- LinkedIn: https://www.linkedin.com/in/barithi-subramanian-91b730208/

- Google Scholar: https://scholar.google.com/citations?user=kJnV_74AAAAJ&hl=en
- Personal: https://barathi-1993.github.io./

Publications

PUBLICATIONS

- **A deep learning-based automated pipeline for colorectal cancer detection in contrast-enhanced CT images.** *Computerized medical imaging and graphics : the official journal of the Computerized Medical Imaging Society*
  Qiu, C., Miller, S., Subramanian, B., Ryu, A., Zhang, H., Fisher, G. A., Shah, N. H., Mongan, J., Langlotz, C., Poullos, P., Shen, J.
  2026; 128: 102717
- **STARC-9: A Large-scale Dataset for Multi-Class Tissue Classification for CRC Histopathology.** *ArXiv*
  Subramanian, B., Jeyaraj, R., Peterson, M. N., Guo, T., Shah, N., Langlotz, C., Ng, A. Y., Shen, J.
  2025