

Adhithya Bhaskar

Computational reproducibility • Automated research pipelines • LLM evaluation
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Education

University of Southern California

Expected December 2026

Ph.D. Candidate in Industrial and Systems Engineering

Coursework: Applied Generative AI for enterprises; Advanced NLP; Design for User Experience

University of Illinois at Urbana-Champaign

December 2020

B.S. in Mechanical Engineering with a Minor in Computer Engineering

Research & Technical Experience

Doctoral Research - Reproducible Research Systems & AI Evaluation

Los Angeles, CA

University of Southern California

May 2021 - Present

- Created ReproReady, designed and built its static-readiness score, and led a NeurIPS 2010-2025 study estimating how much manual reproduction work research artifacts remove rather than whether the code would run
- Designing a journal-facing ReproReady static artifact checker to give reviewers exact evidence and inspection limits without executing research code
- Won a one-year REAL@USC-Meta Center fellowship to build automated arXiv parsing and text-extraction pipelines and benchmark GPT-4 and keyword search against manual labels for 50 ML preprints; published the work as first author at ACM REP 2024 with the open-source project [reproscreeener](#)

Scientific Solutions Engineering Intern

Urbana, IL

Flywheel.io

May 2022 - August 2022

- Built signal-processing and filtering stages used to extract cardiac physiological response functions from raw fMRI data
- Containerized Python, MATLAB, and Bash extraction workflows with Docker for parallel execution, reducing runtime by over 60%

Research Intern (SPIN)

Urbana, IL

National Center for Supercomputing Applications

June 2017 - July 2019

- Identified reproducibility barriers by assessing code and data access across [306 Journal of Computational Physics articles](#) and conducting hands-on reproduction studies of seven; coauthored three publications
- Built scientific tests, CI workflows, and standardized Reproduction Packages that automated parameter testing, plot generation, and result validation across seven computational-physics studies

Selected Publications & Recognition



- Reproscreeener: Leveraging LLMs for Assessing Computational Reproducibility of Machine Learning Pipelines. [DOI](#)
Adhithya Bhaskar, Victoria Stodden. ACM REP, 2024
- Learning from reproducing computational results: introducing three principles and the Reproduction Package. [DOI](#)
Matthew S. Krafczyk, August Shi, **Adhithya Bhaskar**, et al. Phil. Trans. R. Soc. A, 2021
- Scientific Tests and Continuous Integration Strategies to Enhance Reproducibility in the Scientific Software Context. [DOI](#)
Matthew Krafczyk, August Shi, **Adhithya Bhaskar**, et al. ACM P-RECS, 2019
- Jenny Wang Excellence in Teaching Award (2023, 2026); Outstanding Teaching Assistant of the Year (2023, 2026)

Teaching & Technical Skills

- Created an R-based Predictive Analysis project combining asynchronously trained trees into one random forest
- Designed and taught Human Factors Engineering labs and assignments on topics including UI/UX for web-interface design
- **Core tools:** Python, R, SQL, Bash, MATLAB; Docker, Git, Snowflake, GCP, AWS