Rahul Yedida

Website :: GitHub :: LinkedIn :: Google Scholar

hello@ryedida.me
+1 (206) 660-7542

Education

North Carolina State University — Raleigh, NC
Ph.D. Computer Science – Advisor: Dr. Tim Menzies — *Aug 2019 - May 2024*

PES University — Bangalore, India
B.E. Computer Science — *Aug 2015 - May 2019*

Recent Employment

Amazon — New York, NY
Software Dev Engineer Intern — *May 2023 - Aug 2023*

- Implemented profile locks for Prime Video on Echo Show devices.
- **Technology:** React Native, TypeScript

Software Dev Engineer Intern — *May 2022 - Jul 2022*

- Developed a full-stack system to publish announcements in socrecards used by delivery service partners (DSPs).
- **Technology:** React/Redux, TypeScript, Redux Saga, DyanmoDB, Java Spring

North Carolina State University — Raleigh, NC
Graduate Teaching Assistant — *Aug 2023 - May 2024*

- TA (with 2 others) for 149 students for a graduate Automated Software Engineering course.
- TA (with 4 others) for 289 students for a graduate Software Engineering course.

Graduate Teaching Assistant — *Aug 2022 - May 2023*

- TA (with 3 others) for 97 students for a graduate Automated Software Engineering course.
- TA (with 4 others) for 233 students for a graduate Software Engineering course.

Graduate Research Assistant — *Jan 2020 - May 2022*

- **Better, faster deep learning for SE:** Improved defect prediction by up to 123% (F-1 score), code smell detection by up to 30% (AUC)
- **Semi-supervised learning:** Achieved state-of-the-art results on static code warnings analysis using 10% of the labels.

Recent Publications

See full list on Google Scholar.

1. Baldassarre, M. T., Ernst, N., Hermann, B., Menzies, T., & **Yedida, R.** (2023). (Re)use of Research Results (is Rampant). *Communications of the ACM, 66(2), 75-81.*
2. **Yedida, R.**, Kang, H. J., Tu, K., Lo, D., & Menzies, T. (2023). How to Find Actionable Static Analysis Warnings: A Case Study with FindBugs. *IEEE Transactions on Software Engineering, (01), 1-17.*
3. **Yedida, R.**, Krishna, R., Kalia, A., Menzies, T., Xiao, J., & Vukovic, M. (2023). An Expert System for Redesigning Software for Cloud Applications. *Expert Systems with Applications.*
4. **Yedida, R.**, Menzies, T. (2022). How to Improve Deep Learning for Software Analytics (a case study with code smell detection). In *2022 IEEE/ACM 19th International Conference on Mining Software Repositories (MSR). IEEE, 2022.*
5. **Yedida, R.**, & Menzies, T. (2021). On the Value of Oversampling for Deep Learning in Software Defect Prediction. *IEEE Transactions on Software Engineering, doi: 10.1109/TSE.2021.3079841*

Funding

$5,000, Google Cloud Academic Research Grant, Feb 2022

Service to Profession

Reviewer, ICML 2024; Neural Processing Letters 2023; Neural Computing & Applications (NCAA), 2023; Artificial Intelligence Review 2023; ICLR 2024; NeurIPS 2023; Journal of Big Data, 2023; Automated Software Engineering (ASE), 2023; Empirical Software Engineering (EMSE), 2021; IEEE Symposium Series on Computational Intelligence (SSCI) 2020

PC Member, International Conference on AI Foundation Models and Software Engineering (FORGE) 2024; Automated Software Engineering (ASE) Artifact Evaluation Track, 2022; International Conference on Software Maintenance and Evolution (ICSME) Artifact Evaluation Track, 2021, 2022, 2023; International Conference on Modeling, Machine Learning, and Astronomy (MMLA), 2019

Student Volunteer, Automated Software Engineering (ASE) '21

Honors and Awards

Google Cloud Research Innovator, Feb 2022

Google Cloud Champion Innovator, Oct 2022

Google Cloud Champion Innovator - Cloud AI/ML, Jul 2023

Google Cloud Research Innovators Mentor, Dec 2022

Relevant Projects

Programmable Resumes Aug 2023 - Present
Python *GitHub*

Developed a specification and implementation for modular, customizable resumes with support for two popular LaTeX templates.

pysh May 2021 - Present
C++, TMLanguage *GitHub*

Developed a superset of Python that allows running Shell code natively, with a VS Code syntax highlighting extension.

RAISE Aug 2020 - Present
Python, Keras *GitHub :: PyPI*

Sole developer for a PEP8-compliant, ML Python package used by our research lab and others for replicable results. Downloaded 21k times.

Threaded Discussions Website Feb 2021 - Jun 2021
MongoDB, Node.js, React *GitHub*

Companion website for video calls that allows for Reddit-style, threaded discussions.

Google/Meta Data Mining Feb 2021 - May 2021
Python, Keras *GitHub*

Data science project to use Google Takeout and Meta user data to suggest products to advertise to a user from Amazon best-sellers using DistilGPT-2, and achieved 0.6 F-1 score.

Skills

Languages: Python, TypeScript, Java, C++

Frameworks: Flask, Keras, PyTorch, Node.js, React

Databases: MySQL, MongoDB, DynamoDB