

# Rahul Yedida

Website :: [GitHub](#) :: [LinkedIn](#)

[r.yedida@pm.me](mailto:r.yedida@pm.me)

(919)-636-8327

## EDUCATION

---

### North Carolina State University

*Ph.D. Computer Science - GPA: 3.9/4.0*

Raleigh, NC

*Aug. 2019 – Present*

### PES University

*B.E. Computer Science - GPA: 3.2/4.0*

Bangalore, India

*Aug. 2015 – May 2019*

## EMPLOYMENT

---

### North Carolina State University

*Graduate Research Assistant*

Raleigh, NC

*Jan. 2020 – Present*

- **Research:** Co-authored 3 first-author papers and 2 other papers.

*Graduate Teaching Assistant*

*Aug. 2019 – Jan. 2020*

- **Office hours:** Held office hours for 54 undergraduate students.
- **Lecture:** Delivered lectures on object-oriented programming and RAI in C++.

### Indian Institute of Astrophysics

*Research Intern*

Bangalore, India

*Jul. 2018 - Mar. 2019*

- **Image denoising:** Worked on image restoration of globular clusters using convolutional neural networks.
- **Research:** Proposed novel adaptive learning rate scheme for deep neural networks.

## SKILLS

---

**Languages:** Python, JavaScript, C++, Swift, VB.NET

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

**Databases:** SQL, MongoDB

## PROJECTS

---

### Reddit Timer

*React, Styled Components, Sass*

Apr. 2021 – Present

[GitHub](#)

Website to help marketing teams time posts on Reddit for maximum attention.

### SendToFuture

*iOS, Swift*

Apr. 2021 – Present

[GitHub](#)

iOS app to “snooze” links for a few hours.

### Google Takeout Data Mining

*Python, Keras*

Feb. 2021 – May 2021

[GitHub](#)

Data science project to use Google Takeout data to suggest products to advertise to a user from Amazon best sellers using BERT and achieved 0.4 F-1 score.

### Threaded Discussions Website

*MongoDB, Node.js, React*

Feb. 2021 – Present

[GitHub](#)

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

### NearConnect

*iOS, Swift*

Nov. 2020 – Mar. 2021

[GitHub](#) :: [App Store](#)

iOS app to connect with people nearby using multicast peer-to-peer connections.

### RAISE

*Python, Keras*

Aug. 2020 – Present

[GitHub](#) :: [PyPI](#)

Sole developer for a PEP8/PEP257-compliant, ML Python package used by our research lab. Downloaded 3,300 times.

### Personalized Chatbot

*Python, Keras*

May 2019

[GitHub](#)

Fine-tuned a GPT-2 345M model on 730k messages from Telegram logs to create a personalized chatbot.

## Intelligent Tutoring System

Sep. 2018 – May 2019

*Python*

[GitHub](#)

Implemented an Intelligent Tutoring System backend using Bayesian Knowledge Tracing and a novel question selection algorithm.

## Human Activity Data Project

Oct. 2018 – Nov. 2018

*Python, Keras*

[GitHub](#)

Collected personal activity data for 9 months, grouped tasks into 21 categories. Analyzed most productive hours of the day and built a 2-layer predictive LSTM model, achieving 42% top-5 accuracy.

## JournalBear

Jun. 2017 – Feb. 2019

*JavaScript, Electron*

[GitHub](#) :: [Softpedia](#)

Cross-platform journal application with AES-256 encryption. Rated 4/5 by Softpedia.

## Results Scraper

Mar. 2018 – Aug. 2018

*MongoDB, Express, React, Node.js*

[GitHub](#)

Website for scraping university examination results and displaying charts and printable reports, with caching using a database.

## Video Sharing Website

Oct. 2017 – Dec. 2017

*MySQL, Express, React, Node.js, Sass, Elasticsearch*

[GitHub](#)

Simplified implementation of a video-sharing website with subscriptions and custom searching.

## Xtreme Calculations

Apr. 2013 – Oct. 2017

*VB.NET, Python*

[Softpedia](#)

Windows math software to solve scientific and mathematical problems, with over 30,000 downloads over multiple sites.

## Video Indexer

Jun. 2017 – Sep. 2017

*C++, Qt, CMUSphinx*

[GitHub](#)

Cross-platform desktop application to detect the time(s) a given keyword was spoken in a given video.

## Web development projects

Jan. 2017 – Nov. 2017

*MongoDB, Express, React, Node.js, D3, Sass*

[GitHub](#)

Projects include URL shortener, rogue-like dungeon crawler game, voting application, Simon game, land surface temperature heatmap, and mapping meteorite impacts across the globe.

## PUBLICATIONS

---

Agrawal, A., Yang, X., Agrawal, R., **Yedida, R.**, Shen, X., & Menzies, T. (2021). Simpler Hyperparameter Optimization for Software Analytics: Why, How, When?. *IEEE Transactions on Software Engineering*, doi: 10.1109/TSE.2021.3073242

Yang, X., Chen, J., **Yedida, R.**, Yu, Z., & Menzies, T. (2021). Learning to recognize actionable static code warnings (is intrinsically easy). *Empirical Software Engineering*, 26(3), 1-24.

**Yedida, R.**, Yang, X., & Menzies, T. (2021). When SIMPLE is better than complex: A case study on deep learning for predicting Bugzilla issue close time. *arXiv preprint arXiv:2101.06319*.

**Yedida, R.**, & Menzies, T. (2021). On the Value of Oversampling for Deep Learning in Software Defect Prediction. *arXiv preprint arXiv:2008.03835*.

Saha, S., Nagaraj, N., Mathur, A., **Yedida, R.**, & Sneha, H. R. (2020). Evolution of novel activation functions in neural network training for astronomy data: habitability classification of exoplanets. *The European Physical Journal Special Topics*, 229(16), 2629-2738.

**Yedida, R.**, Abrar, S. M., Melo-Filho, C., Muratov, E., Chirkova, R., & Tropsha, A. (2020). Text Mining to Identify and Extract Novel Disease Treatments From Unstructured Datasets. *arXiv preprint arXiv:2011.07959*.

**Yedida, R.**, Saha, S., & Prashanth, T. (2020). LipschitzLR: Using theoretically computed adaptive learning rates for fast convergence. *Applied Intelligence*, 1-19.

- Sridhar, S., Saha, S., Shaikh, A., **Yedida, R.**, & Saha, S. (2020, July). Parsimonious Computing: A Minority Training Regime for Effective Prediction in Large Microarray Expression Data Sets. In *2020 International Joint Conference on Neural Networks (IJCNN)* (pp. 1-8). *IEEE*.
- Khaidem, L., **Yedida, R.**, & Theophilus, A. J. (2019, November). Optimizing Inter-nationality of Journals: A Classical Gradient Approach Revisited via Swarm Intelligence. In *International Conference on Modeling, Machine Learning and Astronomy* (pp. 3-14). *Springer, Singapore*.

## TALKS

---

- Complexity Classes and NP-Completeness*, presented at PES University, Bangalore, 2017.
- How to design a Flappy Bird game*, presented at PES University, Bangalore, 2018.
- Machine Learning*, presented at PES University, Bangalore, 2018.
- An Introduction to Data Analysis*, presented at PES University, Bangalore, 2018.

## SERVICE TO PROFESSION

---

**Reviewer**, IEEE Symposium Series on Computational Intelligence (SSCI) 2020

**Technical Program Committee Member**, International Conference on Modeling, Machine Learning, and Astronomy, 2019