

Arjun R. Rao

SOFTWARE DEVELOPER · SPEAKER · RESEARCHER

✉ mailarjunrao@gmail.com | 🏠 arjun.fyi | 📧 arjun-rao | 🌐 arjunrao

Education

M.S. Ramaiah Institute of Technology(RIT)

B.E. IN INFORMATION SCIENCE AND ENGINEERING

- CGPA: 9.41/10

Bangalore, India

Aug. 2014 - June 2018

Experience

Stride.ai Inc.

NLP ENGINEER

- Trained models for document classification (above 90% precision and recall) and clustering. Additionally developed interactive visualizations to view and provide feedback on model predictions using d3.js and Angular.
- Developed interactive visualizations for viewing entity relationships using d3.js
- Lead developer for a custom PDF Viewer built using pdf.js that allows for user annotations functions and additional capabilities. The viewer is being used in 10+ Projects.
- Technologies Used: Python, Angular, Typescript, Webpack, PDF.js, Internal tools

Bangalore, India

July. 2018 - Present

Stride.ai Inc.

RESEARCH AND DEVELOPMENT INTERN

- Optimized Named Entity Extraction models in a production project to improve accuracy by combining general NER dataset with context specific data.
- Implemented end to end web based projects for process automation using Django, Angular and internal libraries.
- Built scrapers for automatically extracting information from multiple websites handling form submissions, and other UI interactions
- Technology Used: Django, Selenium, Angular, CoreNLP, Internal tools

Bangalore, India

Jan. 2018 - May. 2018,

Oct. 2016 - Dec. 2016

Cloud Developer Relations, Google Inc.

DEVELOPER PROGRAMS ENGINEER INTERN

- Built tools to help track code repositories and generate customized notifications, for faster triage of issues.
- Part of the project was released as open source software, and can be found at github.com/GoogleCloudPlatform/issue tracker
- Technology Used: Google Cloud Datastore, Google BigQuery, Google App Engine, GoLang, Angular2

San Francisco, U.S.A

June. 2017 - Sept. 2017

M.S. Ramaiah Institute of Technology

TEACHING ASSISTANT & FACILITATOR, GOOGLE APPLIED CS WITH ANDROID

- Teaching Assistant for Applied CS with Android Course by Google for undergraduate students in pre-final year and final year, at RIT, involving application of computer science concepts using Android as a platform.
- Developed Codelabs, internal sites, auto grading systems for java code, and an online submission platform for students to upload code.
- Have taught over 200 students in 5 cohorts of the course.
- RIT was selected as one of the 5 universities to be featured in a case study for University Adoption of the program. [Link]
- Recognized as a top facilitator for the year 2016-2017 in the program.
- Technology Used: Android Studio, HTML5 & CSS

Bangalore, India

Feb. 2016 - Dec. 2017

CSIR- Central Electronics Engineering Research Institute

RESEARCH FELLOW

- Two month internship at the Computer Vision Lab, CSIR-CEERI as part of the Indian Academy of Sciences Summer Research Fellowship under Prof. Santanu Chaudhury
- Research project titled "Catadioptric Scene Analysis".
- Worked on implementation of unwrapping algorithms and evaluation of computer vision algorithms for pedestrian detection on catadioptric images.
- Technology Used: Matlab - Computer Vision Toolbox, OpenCV

Pilani, Rajasthan, India

Jun. 2016 - Aug. 2016

Publications

PAPERS

Milo: A visual programming environment for Data Science Education

Lisbon, Portugal

ARJUN R RAO, AYUSH BIHANI, MYDHILI K NAIR

October 2018

- [PDF] Proceedings of 2018 IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC'18), pp. 211-215. (To Appear)
- Designed and implemented a novel visual programming environment to help novice students and non-programmers learn Data Science and ML concepts using block based programming.

Context Based Approach for Second Language Acquisition

New Orleans, USA

NIHAL V NAYAK, ARJUN R RAO

June 2018

- System paper for Duolingo's shared task on Second Language Acquisition Modelling (SLAM 2018). [PDF]
- Published in the Proceedings of the NAACL-HLT Workshop on Innovative Use of NLP for Building Educational Applications (BEA at NAACL 2018)
- Trained logistic regression model to predict the likelihood of a student making a mistake while answering an exercise on Duolingo. Made use of features inspired by research in code-mixed language learning where context plays an important role.
- Result: AUROC scores for English/Spanish = 0.821, Spanish/English = 0.790 and French/English = 0.812. 2nd best linear model, finished 9th overall in SLAM 2018

BOOK CHAPTERS

DearDiary - An IBM Watson Powered Mental Healthcare Tracker

Springer, Singapore

ABHILASH K, AMISHA A, ANISHA M., ARJUN R RAO

November 2017

- Book Chapter in Applications of Cognitive Computing Systems and IBM Watson, published by Springer, Singapore
- DOI: 10.1007/978-981-10-6418-0_8

Big Data Predictive Modeling and Analytics

Bangalore, India

MYDHILI K NAIR, ARJUN R RAO, MIPS A PATEL

October 2017

- Book chapter in Big Data Analytics: Tools and Technology for Effective Planning. (ISBN 9781138032392)
- Published by CRC Press Taylor & Francis Group

Data Migration Techniques from SQL to NoSQL

Bangalore, India

MYDHILI K NAIR, NIHAL V NAYAK, ARJUN R RAO

March 2017

- Book chapter in NoSQL: Database for Storage and Retrieval of data in Cloud. (ISBN 9781498784368)
- Published by CRC Press Taylor & Francis Group

Honors & Awards

NATIONAL

October 2016	Winning Team , Hackathon Challenge, IBM Collaborative Academia Research Exchange (ICARE), Conference	Bangalore, India
June 2016	Fellow , Indian Academy of Sciences Summer Research Fellowship Program 2016	Bangalore, India
March 2015	Finalist , Build the Shield 2016 - Cyber security contest by Microsoft	Hyderabad, India

REGIONAL

June 2018	Best Outgoing Student , Recognized by the Dept. of Information Science and Engineering, RIT as Best Outgoing Student for the batch of 2014-2018.	RIT, Bangalore
March 2017	Best Performer , PAYSE Ethical Hacking Challenge, by Nucleus Software	RIT, Bangalore
February 2017	Winner , Hackathon, Empyreal 2017	RIT, Bangalore

Talks

Apps Script Study Jam

Bangalore India

FACILITATOR FOR GDG BANGALORE'S WORKSHOP ON GOOGLE APPS SCRIPT

February 2018

- Conducted a day long hands-on workshop on Google Apps Script for Google Developer Groups Bangalore.
- [\[Link to Slides\]](#)

The Power of Google Apps Script

Bangalore India

SPEAKER FOR GDG BANGALORE'S DEVFEST

October 2017

- Introduced Google Apps Script with use cases, workflows and demos at Google Developer Groups Bangalore's annual developer conference.
- [\[Link to Slides\]](#)

Extracurricular Activities

Two Day Hands on Workshop on UML Modelling and Design Patterns

Global Academy of Technology,

Bangalore

TEACHING ASSISTANT

March. 2017

- Conducted hands-on sessions on MVC using Flask.
- Wrote problem sets, walkthroughs, slides & lecture notes for the hands on sessions
- Setup a cloud based IDE for students to use on c9.io to reduce setup time

Google India's Code to Learn Contest 2016

Bangalore, India

JUDGE

May 2016

- Evaluated projects submitted by students of classes 5 to 10, created using Scratch and MIT App Inventor.

IEEE ANTS Conference 2016

Indian Institute of Science,

Bangalore

CONFERENCE VOLUNTEER AND APP DEVELOPER

Nov. 2016

- Developed an Android & Web App to handle QR Codes on attendee badges for registration, and conference logistics
- Helped organize the conference as a student volunteer

IEEE WIE Symposium 2016, Ignite Fest 2016, TEDx MSRIT 2015

RIT Bangalore

EVENT VOLUNTEER

- Organized, and conducted a Capture the Flag competition as part of Ignite Tech Fest at RIT 2016
- Helped organize events as a volunteer for TEDx MSRIT 2015 & IEEE WIE Symposium 2016