Sahil Yerawar

Curriculum Vitae

Education

2015–2019	**Bachelor of Technology, Computer Science and Engineering**, *Indian Institute of Technology*, Hyderabad,India, *GPA − 8.52/10*.
2014–2015	**Senior Secondary**, *DAV Public School (CBSE)* , Pune,India, *Percentage − 95.5%*.
2012–2013	**Secondary**, *DAV Public School (CBSE)* , Pune,India, *Percentage − 96.5%*.

Experience

Industrial

June 2021 – Present	**Software Engineer(Backend)(Part-Time)**, *Snazzy Care Private Ltd.*, Bangalore. Developing an extensive backend for the launch of website and its android app. Managing the general server architecture of backend using AWS Suite.
July 2019 – July 2020	**Software Engineer**, *Honeywell Technology Solutions Private Ltd.*, Hyderabad. Member of Displays and Graphics Team in Aerospace Domain. Responsible for developing display applications for Aircraft Cockpit Systems.
May 2018 – July 2018	**Contributor**, *Google Summer of Code*, Polly Labs, Virtual. A joint project with Polly Labs and Chapel Language Community to implement Polly Loop Optimizer within Chapel Compiler for extended GPU support. It was well-appreciated by the LLVM Community.

Research

April 2021 – Present	**Research Assistantship**, *Dr.Srijith P.K.*, IIT-Hyderabad. Along with Prof Maunendra Desarkar, working on projects related to machine learning using alternate data sources using knowledge distillation techniques.
September 2020 – February 2021	**Research Assistantship**, *Dr.Pawan Goyal*, IIT-Kharagpur. Contributing to projects related to Explainablity in Recommender Systems(Information Retrieval) and creation of Indic Datasets(NLP).
May 2017 – July 2017	**Research Internship**, *Dr. Ramakrishna Upadrasta*, IIT-Hyderabad. Contributed to LLVM Compiler Infrastructure by developing Flag Mining Tool using iterative compilation technique.

Projects

Dassault Aircraft Cockpit Applications, *Honeywell*.

Developed multiple cockpit display applications for Dassault Aircrafts using C++.
- Developed Android applications for a cloud based solution for Runway Traffic Navigation.
- Responsible for writing clear and concise requirement documents for some of the core products in the Display applications.
- Responsible for modularization of Displays software to reduce testing time by more than 50%.

Automatic information extraction from NOTAM text, *Honeywell*.

Built a NLP-Based text extraction tool to parse important data from NOTAM texts. Used Tensorflow and Python to build this tool.

Digital Flight Manual, *Honeywell*.

Built a QA based tool to relate every question regarding particular flight manual towards an appropriate paragraphs which contains it's answer. Used the concepts of Word2Vec, Python and the libraries like Tensorflow and Facebook's FastText for this purpose.

Predicting Product Review Helpfulness, *IIT Hyderabad*.

Used language models and deep learning techniques to predict the helpfulness of the Amazon Instant Video Reviews. The language models were efficient in extrapolating the review content.

Finding High-Quality Content in Social Media, *IIT Hyderabad*.

Developed a prototype machine learning model identifying high-quality content in QA websites based on user contributions and intrinsic content quality.

GCN for Temporal Graphs, *IIT Hyderabad*.

Developed a prototype CNN model which works on extending the Graph Convolutional Networks to dynamic graphs.

Explainability in Recommendation Systems, *IIT Kharagpur*.

Evaluated different post-hoc explainability algorithms used on top of recommender systems and tried to develop a metric measuring the explainability quality of these methods.

Reputation Score Prediction using Alternate data, *(Ongoing, IIT Hyderabad)*.

With the uneven distribution of privileged features among the users, we are developing semi-supervised models to predict reputation scores for Community QA site users using only commonly available data with the help of teacher model having access to privileged features as well.

Presentations

Yerawar, S., Bhat, S., Ferguson, M., Pfaffe, P., & Upadrasta, R. (n.d.). Leveraging polyhedral compilation in chapel compiler. *Poster Presented at: 2019 European LLVM Developers Meeting, Brussels, Belgium*. (link, pdf)

Courses Taken

- Data Structures and Algorithms
- Probabilistic Machine Learning
- Compilers
- Parallel and Concurrent Programming
- Applied Machine Learning
- Deep Learning
- Data Mining
- Distributed Computing
- DBMS
- Information Retrieval

Online Courses

○ Natural Language Processing Specialization by DeepLearning.ai (Set of 4 Courses in Coursera).

Technical Skills

Languages	C, C++, Python, Java, Golang
Web/App Technologies	HTML,CSS, Node.js, Android App Programming, Vue.js, Django
Tools and Frameworks	MySQL,MongoDB, Git, Tensorflow, Pytorch, AWS

Languages

English	**Professional Level**	*Conversationally fluent*
Marathi	**Mother Tongue**	
Hindi	**Conversational**	*Conversationally fluent*
Spanish	**Beginner**	
Sanskrit	**Beginner**	

Teaching Assistant Positions

Aug 2017	**Discrete Structures I**	*Under Prof. Srijith P.K. (IITH)*
Jan 2019	**Discrete Structures II**	*Under Prof. Maria Francis (IITH)*