Email: rishabmallick6@gmail.com rishab.page GitHub: github.com/rishabgit

### EXPERIENCE

# **Small Joys**

AI Engineer Aug 2022 - Present

- Inclusive AI: Working on mitigating unintended bias to improve robustness against adversarial text.
- o Deployment: Built inference API pipeline on AWS. Tools: Lambda, DataSync, EC2, Docker, FastAPI.
- Health: Pilot project for predicting behavioral health from therapy sessions.

AI Engineer Intern

Nov 2021 - Jul 2022

- o Insights: Part of the therapist dashboard shows easy-to-digest information from user journals using an ensemble of modules. R&D on Themes and Journal Abstraction AI modules.
- ScreenerOMR: Python package for extracting answers and relevant data from scanned medical screeners.
- Annotation: Setup annotator cohorts with a team lead and designed labeling process for golden data generation. Built classification data augmentation module using GPT-3.

#### Google Summer of Code

Student Software Developer

Jun 2021 - Aug 2021

- GenomicInfo: Researched and created an automated framework for genomic data extraction from C. Elegans papers for WormBase using hybrid combination of regular expressions, dictionary of terms and BERT NER.
- Results: Slashed the former biocuration timing of hours to few minutes, and also discovered new data from old papers previously missed during manual curation.

# Centre for Development of Advanced Computing

Research Intern Apr 2021 - Jun 2021

• Masked Face Recognition: Worked with the image processing team on designing a mask compatible facial recognition system implemented for low-end devices using Python/TFLite.

### Myraa Technologies

AI Solutions Intern

Sep 2020 - Mar 2021

- o Object Detection: Crafted custom object detection model for wearable low-end devices using TFLite/Android Studio/Java.
- Exam Proctor: Designed an end-to-end online exam proctoring pipeline from scratch consisting of facial recognition and features tracking, and gadget detection.
- CAD Comparer: Programmed an engineering drawing comparison tool for universities.
- o Other POCs: Car damage diagnosis system on low data, & explored usage of privacy-preserving DL with PySyft.

### Tata Steel

Data Analyst Intern

Aug 2020 - Sep 2020

• Analysis: Coded scripts to remove discrepancies in geographical data for the local dealers using mapping APIs.

### Awards

Dr. APJ Abdul Kalam IGNITE Award | National Innovation Foundation - India

November 2015

- Received IGNITE 2015 award by the former President of India, Pranab Mukherjee, for the idea 'Pay as you weigh' - one of 31 innovations selected from across India. Patent ID: 1189/KOL/2015
- Regional Winner of ZooHackathon | WWF

November 2019

- Awarded for engineering best solution to curb wildlife trafficking among 12 other finalists
- Finalist of ACM India East Hackathon | Association of Computing Machinery

February 2020

o Recognized for making sign language prediction app during a 24-hr hackathon - one of 10 finalists from east India.

#### Publication

Accelerated variant curation from scientific literature using biomedical text mining (Jun 2022)

Rishab Mallick, Valerio Arnaboldi, Paul Davis, Stavros Diamantakis, Magdalena Zarowiecki, Kevin Howe

### EDUCATION

# St. Thomas' College of Engineering and Technology

India