Amit Singh

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Areas of Interest Psycholinguistics, Bilingualism and Attention

Education University of Hyderabad, Hyderabad, India

M.Sc., Neural and Cognitive Science, 2018-2020 (CGPA 9.12, Distinction)

Specialization: Cognitive Science

Jawaharlal Nehru University, New Delhi, India

B.A(Hons.) German, 2014-2017 (CGPA 5.46)

University of Delhi, New Delhi, India

Certificate in German Language, 2013-2014 (66 percent)

All India Senior Secondary School Examination, New Delhi Science (Physics, Chemistry, Mathematics and English) 2011-2013

Awards

UGC-NET, Junior Research Fellowship, Psychology, July 2020

Awarded by UGC to top 5 percent candidates in a subject to pursue research.

Aggregate Test Score: 197/300

Work Experience

Software Engineering Research Center, IIIT Hyderabad

Research Intern, Speech Signal Processing, 2019 (Summer)

Worked in Speech Signal Processing Lab, IIIT, Hyderabad. I was assigned an open source development project to code, develop, test and implement a Python and JavaScript based Speech Signal Application on Github. The application was developed to visualize spectral features of voiced and unvoiced speech sounds using Linear Predictive Coding algorithm. The project can be accessed on (Github page)

Major responsibilities:

- Version Control System project management using multiple branches on Git.
- Using Python libraries (Machine Learning modules: Scikit-learn, Pandas and Numpy), JavaScript library P5js, HTML and CSS to build speech signal analysis application on web.
- Using R-programming libraries (dplyr and lmer) to do hypothesis testing.
- Using SR experiment builder software to design eye-tracking experiments for lab (VWpre for eye-tracking)

Alexa Operations, Amazon Development Center, Bengaluru, India Translation Associate, German (Full Time), 2017-2018

During my full-time professional experience at Amazon Development Center, Bangalore, I worked in a collaborative environment and enhanced my interpersonal, communication, time-management, and translational skills in German and English. I learned computational methods to analyse corpus data and extract linguistic features from it. The applied linguistics skills which I learned during my full-time job was instrumental during my internship in computational linguistics at IIIT Hyderabad and my masters in Neural and Cognitive Sciences at University of Hyderabad.

Major responsibilities:

- Corpus sentiment analysis and Part-of-Speech (POS) Tagging in German.
- Translation German to English and vice-versa.
- Analyzing data and be responsible for highlighting gaps, recommending solutions, driving/influencing inter-function decisions.
- Work towards enhancing catalogue user experience by minimising the andon cords (Defect Reduction).

M.Sc. Dissertation

Interlocutor awareness and bilingual language choice: An eye-tracking study on Hindi-English bilinguals

This eye-tracking study investigates whether in an interactional context the language choice in high-proficient Hindi-English bilinguals is constrained by the proactive attentional network and perceived language proficiency of the speaker during communication.

Supervised by: Prof. Ramesh Kumar Mishra

Lab Experience

Action Control and Cognition Lab, University of Hyderabad

Major responsibilities:

- Research ethics documentation.
- Participant recruitment and eye-tracking data collection.
- Stimulus creation and experiment designing on SR Research Experiment Builder.
- Eye-tracking data analysis on SR Research DataViewer.
- Conducting experiments on Evelink 1000 Eve-Tracking device.
- Neuroscan 64-Channel EEG system setup.
- Time-series data analysis on Matlab EEGLAB.

Neuronal Systems Lab, University of Hyderabad

Major responsibilities:

- Extracellular ERG recording and PR conditioning in Honeybees.
- Intracellular Recording using glass electrodes.

Technical Skills Matlab (Pattern Recognition Toolbox, Statistical Toolbox, EEGLAB)

Python (Machine Learning modules: Scikit-learn, Pandas and Numpy)

R programming (Linear mixed models, VWPre - Eyetracking)

Stan (Bayesian data analysis)

SR Experiment Bulider (Eyetracking) HTML, JavaScript, Latex (Basic)

Languages English (Proficient)

German (CEFR B2.2)

Hindi (Native)

Workshops Eye-Tracking workshop with Tobii-pro and CNCS Hyderabad, March 2019

3rd Workshop on Brain, Computation and Learning, IISc Bangalore, June 2019 The Science and Significance of Attention, Aug 2019, Instructor: Dr. Raymond Klein 3rd Annual Conference of the Society for Cognitive Science of Culture, Bits Pilani Goa

Title: Literacy in the Multilingual World, 3rd - 7th Feb. 2020

Extracurricular Dance

Convener, JNU Dance Club, 2016-2017

Winner 1st prize, Solo Dance Category, Amazon Annual Fest, 2017 Winner, Solo Dance, Sukoon, University of Hyderabad, 2019

Student Volunteer, 8th National Championship of MaRRS International Spelling Bee,

Osmania University, Hyderabad, 7-8 Feb., 2015

References

(on request)

Dr. Priyada Shridhar Padhye Centre of German Studies School of Language, Literature and Culture Studies Jawaharlal Nehru University, New Delhi priyadashridharpadhye@mail.jnu.ac.in

Prof. Ramesh Kumar Mishra Head, Center for Neural and Cognitive Sciences University of Hyderabad rkmishra@uohyd.ac.in Dr. Joby Joseph Neuronal Systems Lab

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