Biswesh Mohapatra

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Education

Computer Science and Engineering, Integrated Master of Technology 2016 - Present
International Institute of Information Technology(IIIT), Bangalore
CGPA: 3.9/4 Transcript

Interest

Natural Language Processing, Bayesian Statistics, Graph ML, Neuro-Symbolic AI

Publications

* indicates equal contribution

- Ananth Shreekumar*, Biswesh Mohapatra*, and Shrisha Rao. 2020. Incorporating Autonomous Bargaining Capabilities into E-Commerce Systems. In IVA '20: Proceedings of the 20th ACM International Conference on Intelligent Virtual Agents (IVA '20). https://doi.org/10.1145/3383652.3423865

Work Experience

Research Intern May-Aug 2020
IBM Research AI
Interned with the IBM Dialogue Research team where we worked on a novel idea to better the performance of a Task Oriented Dialogue Agent on an extremely small dataset. **Results are currently under submission at a top-tier conference.** arXiv

Research Intern May-Aug 2019
Siemens Corporate Research and Technology Center, India
Worked on low latency activity recognition models for integrating with the Augmented Reality environment. The final model was implemented on the AR core platform of android.

Google Summer Of Code(GSOC) Scholar May-Aug 2018
OpenStreetMap
Managed a plugin named PT Assistant in JOSM(part of OpenStreetMap) which intends to help mappers by allowing them to avoid redundant work by automating it. Code

Research Intern, Multimodal Perception Lab June-July 2018
IIIT Bangalore
Worked on Human Robot Interface(HRI) which involved reading state of the art papers on HRI and implementing various ideas for robust communication between the robot and the user.

Research Activity

Embeddings for Description Logic Reasoning Aug 2020 - Present
A project in collaboration with IBM Research AI and IIIT Delhi to create OWL2 DL concept and role embeddings of various ontologies for faster reasoning.

Keywords - *Knowledge Graphs, Ontologies, Embeddings, Description Logic*

Intelligent Search engine Aug 2019 - April 2020
A project in collaboration with Intel to create a search engine which provides support for questions that needs reasoning. The data could be in the form of text, tables or diagrams.

Keywords - *Named Entity Recognition, Intent Classification, Elastic Search*

Selective Projects

Circuitverse Feb 2017 - Jan 2018

A Web based digital simulator co-developed with one of my batch mate which is currently used by students all across the world. The project got selected as a mentor ogranisation for Google Summer of Code 2019 and 2020.

Technology Used - *Javascript (with canvas for simulator), Ruby on Rails* circuitverse.org

BMTC Cost Optimisation Project Jan 2018 - April 2018

A project under Professor Muralidhara where we came up with algorithms which could help Bangalore Metropolitan Transport Organisation in reducing their operational cost.

Technology Used - *Python, Data structures, Algorithms*

Interest level prediction for rental listings November 2018

A project in Machine Learning course where we predicted the interest level of a particular rental listing on a website given its description. The project helped me in learning data analysis using various tools and libraries such as seaborn. We then compared various models such as XGBoost, Random Forest, Logistic Regression etc.

Technology Used - *Scikit Learn, Numpy, Seaborn* Report

Skills

Languages: Python(Experience with Numpy, SKLearn, Keras, Pytorch, Tensorflow), C, C++, Java, Javascript

Scholarships and Achievements

2017 - 2020	Dean's Merit List, Received scholarship for being in the top five
Jan 2019	Ranked 5th among 6700 teams in the quiz round of Flipkart Grid-Tech Challenge
Jun 2017	Reached Pre-final round in Codechef Snackdown contest
Jul 2016	Secured 99.7 percentile in JEE Mains competitive examination
Jul 2016	Scored 94 percentage in 12th board examination
Apr 2014	Scored 10 CGPA in 10th board examination(CBSE)

Courses

Data Structures and Algorithms, Discrete Mathematics, Machine Learning, Calculus, Software Engineering, Database Management Systems, Linear Algebra, Statistics and Probability, Probabilistic Graphical Models, Visual Recognition, Reinforcement Learning, Compilers, Natural Language Processing

Personal Information

Date of Birth:	16/02/1998
Languages:	English, Hindi, Odiya
Nationality:	Indian