

# Biswesh Mohapatra

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## EDUCATION

Computer Science and Engineering, Integrated Master of Technology  
International Institute of Information Technology (IIIT), Bangalore

2016 - 2021

CGPA: 3.91/4.0

[Transcript](#) [Thesis](#)

## WORK EXPERIENCE

Research Engineer

Sept 2021 - Present

Cognitive Machine Learning Lab (COML), Inria

Working as a Research Engineer in COML, Inria where I am working with Prof. Justine Cassell and [Articulab](#) on Socially Aware Dialog Agents. My research is focused on Multimodal Dialog agents that can interact and maintain a good rapport with people.

Research Intern

May-Aug 2020

IBM Research AI

[arXiv](#) [certificate](#)

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 low resource settings. The work got accepted at Findings of EMNLP 2021.

Research Intern

May-Aug 2019

Siemens Corporate Research and Technology Center, India

[certificate](#)

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

[code](#) [certificate](#)

Managed plugin named PT Assistant in JOSM (part of OpenStreetMap) which intends to help mappers by allowing them to avoid redundant work by automating it.

## INTERESTS

Natural Language Processing, Dialog Systems, Neuro-Symbolic AI, Knowledge Graphs

## PUBLICATION

\* INDICATES EQUAL CONTRIBUTION

- **Biswesh Mohapatra**, Gaurav Pandey, Danish Contractor and Sachindra Joshi. Simulated Chats for Building Dialog Systems: Learning to Generate Conversations from Instructions. In Findings of EMNLP 2021.
- Ananth Shreekumar\*, **Biswesh Mohapatra\***, and Shrisha Rao. Incorporating Autonomous Bargaining Capabilities into E-Commerce Systems. In Proceedings of the 20th ACM International Conference on Intelligent Virtual Agents (IVA '20). <https://doi.org/10.1145/3383652.3423865>

## RESEARCH ACTIVITY

Project Recommendation System

May 2021 - Present

Currently mentoring a project through GSOC program for the open source organisation Circuitverse. We are implementing state of the art NLP techniques to recommend most relatable and useful projects for users.

Keywords - Recommender System, LDA, KD trees

[Report](#)

Embeddings for Description Logic Reasoning

Sept 2020 - May 2021

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

[Code](#)

### Intelligent Search engine

Jan 2020 - May 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

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### 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 organisation for Google Summer of Code 2019 and 2020.

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

[circuitverse.org](#)

### 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 the performance of various models such as XGBoost, Random Forest, Logistic Regression etc. on the dataset.

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

[Report](#)

## SKILLS

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Spoken Languages: English, Hindi, Odiya  
Programming Languages: Python(Experience with Numpy, SKLearn, Keras, Pytorch, Tensorflow), C, C++, Java  
Web Development: Javascript, Ruby on Rails  
Other: Docker, Git

## VOLUNTEERING AND TEACHING

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FEB 2021 AAI 2021 Volunteer  
JAN 2021 ACM CODS-COMAD Volunteer  
JAN-MAY 2021 Teaching Assistant for Mathematics-2. Course ID: SM102

## SCHOLARSHIPS AND ACHIEVEMENTS

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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

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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