



Aasif Majeed

Nationality: Indian **Date of birth:** 30/10/1997 **Gender:** Male

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LinkedIn: <http://www.linkedin.com/in/aasif-majeed-a15b5b197>

Home: Jammu & Kashmir, 191113 Budgam (India)

WORK EXPERIENCE

University research assistant

Simulation Centre for Atomic and Nanoscale Materials(SCANMAT), Central University of Tamil Nadu [12/2022 – 01/2023]

City: Thiruvavur

Country: India

1. Machine learning and artificial intelligence applications in materials discovery and design.
2. Assisting Master's project students in DFT calculations and Machine Learning Techniques.

Masters Project

Simulation Centre for Atomic and Nanoscale Materials(SCANMAT), Central University of Tamil Nadu [12/2020 – 04/2021]

City: Thiruvavur

Country: India

Website: <https://folk.universitetetioslo.no/ravi/cutn/index.html>

Link: [https://github.com/aasifmajeed10/Masters-Project-Thesis/blob/main/AASIF MAJEED thesis \(1160201\).pdf](https://github.com/aasifmajeed10/Masters-Project-Thesis/blob/main/AASIF%20MAJEED%20thesis%20(1160201).pdf)

1. Effect of Sn doping in V_2O_5 as Cathode Material for Magnesium ion Batteries
2. Calculations based on Density Functional theory using VASP code, shows promising cathode properties in this material

EDUCATION AND TRAINING

Integrated Masters Degree in Physics

Central University of Tamil Nadu, [07/2016 – 05/2021]

Address: 610005 Thiruvavur (India)

Website: <https://cutn.ac.in>

Field(s) of study: Natural sciences, mathematics and statistics: *Physics, Chemistry, Mathematics*

Final grade: 8.34/10.0 CGPA – Level in EQF: EQF level 7

Type of credits: Choice Based Credit System (CBCS) – Number of credits: 197

Thesis: First Principle Study of Sn doped V_2O_5 as Cathode Material for Magnesium Batteries.

Higher Secondary Education

Jammu & Kashmir state Board, [12/2012 – 05/2015]

Country: India

Field(s) of study: Natural sciences, mathematics and statistics: *Physics, Chemistry, Mathematics, Biology*

Final grade: 83 % – Level in EQF: EQF level 4

Secondary Education

Jammu & Kashmir state Board [12/2010 – 12/2012]

Country: India

Final grade: 89 % – Level in EQF: EQF level 3

TECHNICAL SKILLS

First Principle Calculations

Extensive experience of electronic structure calculation using density functional theory codes, like:

1. **VASP, Wien2K, Quantum Espresso, TB-LMTO**

Material Informatics

1. Excellent programming skills in **Python**.
2. Sufficient Knowledge of other programming languages like **C, HTML, CSS, JavaScript, FORTRAN**
3. Extensive experience with **machine learning** and **deep learning** libraries such as **TensorFlow, Keras**, and **Scikit-learn**.
4. Excellent knowledge in **exploratory data analysis** using **Pandas, seaborn, matplotlib, NumPy** etc.
5. Extensive knowledge in **web scrapping and data retrieval** in materials databases.
6. Working experience in featuring materials using libraries such as **matminer, pymatgen** etc.
7. Sufficient knowledge in query languages like **SQL, MongoDB**.

Add on skills

1. Operating systems : **windows, Linux**.
2. Proficient in using **Latex, Microsoft office, VESTA, Origin** etc

WORKSHOPS

Participated in two days Indo- Norway Workshop on Functional Materials for Energy Technology (FMET-2019) at Central University of Tamil Nadu, India

[09/2019]

3 day international seminar on ADVANCES IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (AAIML-2021) at Aligarh Muslim University.

[03/2021]

21 day Workshop on Electrochemical Energy Storage: Theory, Experiments, and Applications at held online by the Abdus Salam International Centre for Theoretical Physics (ICTP)

[04/2022]

CERTIFICATION

Supervised Machine Learning: Regression and Classification

An online non-credit course authorized by DeepLearning.AI and Stanford University and offered through Coursera.

Link: <https://coursera.org/verify/97JJXZ2DA9CF>

Advanced Learning Algorithms

An online non-credit course authorized by DeepLearning.AI and Stanford University and offered through Coursera.

Link: <https://coursera.org/verify/72R6Z7RMP5FE>

Using Python to Access Web Data

An online non-credit course authorised by University of Michigan and offered through Coursera.

Link: <https://coursera.org/verify/HYHRMVDV7R3Z>

What is Data Science

An online non-credit course authorized by IBM and offered through Coursera.

Link: <https://coursera.org/verify/VYTH28HGHALX>

RESEARCH INTERESTS

Computational Simulation and Materials design for energy conversion and generation applications using Machine learning and Density functional theory

Quantum Computing

Monte Carlo simulations

Molecular Dynamics simulations

RECOMMENDATIONS

Professor and Head

Name: Dr. P. Ravindran

Phone number: (+91) 8300178007

Email: raviphy@cutn.ac.in

Department of Physics

Central University of Tamil Nadu Thiruvarur ,Tamil Nadu ,India

Head, Simulation Centre for Atomic and Nanoscale Materials (SCANMAT), Central

University of Tamil Nadu.

Adjunct Professor, University of Oslo, Norway (Shanghai Ranking 58)

Publications: 170+ | Citations: 10499 | h-index: 49 as on 26 June 2023.

Professor

Name: Dr. L. Kavitha

Email: lkavitha@cutn.ac.in

Department of Physics

Central University of Tamil Nadu Thiruvarur ,Tamil Nadu ,India

Publications: 160+ | Citations: 4324 | h-index: 40 as on 26 June 2023.

LANGUAGE SKILLS

Mother tongue(s): **Kashmiri**

Other language(s):

English

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

Urdu

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

Hindi

LISTENING C1 READING A1 WRITING A1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

French

LISTENING A2 READING B2 WRITING B2

SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

ACHIEVEMENTS

Academics Achievements

[2016]

Qualified Central University Common Entrance Test

Extra-Curricular Achievements

1. I got 3rd and 2nd position in University level general knowledge and Mathematics quiz competition respectively
2. Got 1st prize in university level quiz competition at Central University Of Tamil Nadu, Thiruvavur