

SYED JAWAD AKHTAR

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I am graduating from the University of Oulu this spring, and I possess competitive technological skills in the fields of robotics, software engineering, and data science. My objective is to secure a trainee or full-time position with an innovative employer that offers great software research and development opportunities.

EDUCATION

Master in Computer Science and Engineering

University of Oulu

2021 – Present

Oulu, Finland

Bachelor in Computer Engineering

Zakir Husain College of Engineering and Technology

2016 – 2020

Aligarh, India

EXPERIENCE

Research Assistant

Perception Engineering Group, UBICOMP, University of Oulu

June 2022 - Present

Oulu, Finland

- Use of 360 cameras & VR headsets with telepresence robots to improve the immersive experience.

Intern - IT Advisory

RSM Saudi Arabia

August 2021

Riyadh, Saudi Arabia

- Auditing companies according to the cybersecurity controls of Saudi ARAMCO.
- Streamlining client requests using ServiceDesk Pro by ManageEngine.

Chairperson

Autonomous Underwater Vehicle Club (Marine Technological Society) - ZHCET

August 2019 – July 2020

Aligarh, Uttar Pradesh

- Mentor of MATE ROV International competition.
- Research and development of acoustic localization on the AUV.
- Vehicle simulation in Gazebo Robotics Simulator.

Research Internship

The University of Kiel

June 2019 – August 2019

Kiel, Germany

- Use of analytical ANN for predicting thermal conductivity of sands and rocks from all around the world.

TECH SKILLS



PROJECTS

Telepresence robots with 360 camera

University of Oulu

August 2022

Finland

View wireless live stream from a 360° camera in a Head-Mounted Display (HMD) and move the robot using body trackers.

Tools & Algorithms: THETA Z1 & V cameras, Probot DOLLY robot & Valve index.

Fake News Detection

University of Oulu

October 2022

Finland

Designed a system for automatic fake News identification from large news articles corpus.

Tools & Algorithms: Tensorflow, scikit-learn, NLTK

Movie Review Project

University of Oulu

March 2022

Finland

API-based review system for movies recommendation.

Tools & Algorithms: SQLAlchemy, Flask RESTful, Pytest

Targeted Advertising using IoT

University of Oulu

December 2021

Finland

Made a client-server architecture to detect age-gender of a person to show them a relevant advertisement.

Tools & Algorithms: Python, MQTT, Mosquitto broker, Gender-Age detector

Deep Reinforcement Learning on AUVs - Final Year Project

Zakir Husain College of Engg. & Tech.

📅 August 2020

📍 India

Simulation of AUVs detecting underwater pipeline defects using RL. Comparative study of RL optimizers (SAC & PPO) for completing the tasks.

Tools & Algorithms: Unity, ml-agents, ROS, Gazebo, RViz, Blender, Google Sketch-up

Acoustic Localization of AUVs

Autonomous Underwater Vehicle Club

📅 January 2019

📍 India

Localization of a beacon underwater, using an array of hydrophones on an unmanned underwater vehicle.

Tools & Algorithms: NI MyRIO, Aquarian H1C, Time Delay of Arrival (TDOA)

PUBLICATIONS

Neural Network Approaches for Computation of Soil Thermal Conductivity

Multidisciplinary Digital Publishing Institute

📅 October 2022

Effective thermal conductivity of unsaturated soils based on deep learning algorithm

2nd International Conference on Energy Geotechnics

📅 November 2020

📍 La Jolla, California

Soft and hard computation methods for estimation of the effective thermal conductivity of sands

International Journal of Thermal Sciences

📅 February 2020

Estimation of seismic wave velocities of crustal metamorphic rocks using ANN

Materials Today: Proceedings

📅 December 2019

📍 Mathura, India

PATENTS

A low cost Autonomous Underwater Vehicle having five degrees of freedom and two thrusters

Patent No. 418647

📅 January 2023

📍 India

6 Pin Underwater Electrical Connector

Indian Patent Application No. 201811027144

📅 July 2018

📍 India

ACHIEVEMENTS



Nokia Hackathon

Show-cased a solution and demo for solving problems related to farming & middle-men [\[Link\]](#)



Students Autonomous Underwater Vehicle Competition 2019

Won 4th position nationally - computer team member



Singapore AUV Challenge 2018

Lead the team and won the Best AUV award



Co-Founder of AUV ZHCET Club

One of the founding members of the technical club in college



Top 4 Idea Presentations

"AUV Surveillance" at Inspiring Entrepreneurs Summit 2018, Saudi Arabia

WORKSHOPS/CONFERENCES

- Presenter - 10th International Conference on Materials Processing and Characterization (ICMPC - 2020)
- NoSQL, Bigdata & Artificial Intelligence Conference by Datumcom
- Introduction to UAVs and Drones
- Android Web Development and Web Designing

COURSES

- Unity learners hub - Game development with VR
- Self-Driving Cars with ROS 2 and Autoware - ApexAI
- Deep Learning A-Z™ - Hands-on Artificial Neural Networks Proficiency course on Python - Udemy

CO-CURRICULAR



Student tutor and university Ambassador - University of Oulu



Blood donation campaign organizer



Social Media manager at Recrufest 2018 - A Mega Job fair