

SYED JAWAD AKHTAR

@ syedjawadakhtar@gmail.com +966-592260461 www.syedjawadakhtar.github.io @syedjawadakhtar
in syed-jawad-akhtar syedjawadakhtar

EDUCATION

Masters in Computer Science and Engineering

University of Oulu

2021 – Present Oulu, Finland

Bachelors in Computer Engineering

Zakir Husain College of Engineering and Technology

2016 – 2020 Aligarh, India

Secondary Education & High School

International Indian School

2012-2016 Jeddah, Saudi Arabia

Central Board of Secondary Education

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 and complete process of obtaining the compliance certificate using ServiceDesk Pro by ManageEngine.

Chairperson

Autonomous Underwater Club (Marine Technological Society) - ZHCET

August 2019 – July 2020 Aligarh, Uttar Pradesh

- Mentor of MATE ROV International competition
- Organizing workshops and seminars for awareness of underwater robotics
- Vehicle simulation in Gazebo Robotics Simulator
- Research and development of acoustic localization on the AUV

Research Internship

The University of Kiel

June 2019 – August 2019 Kiel, Germany

- Applying Artificial Neural Networks (ANN) on Geo-mechanical engineering.
- Use of analytical ANN for predicting thermal conductivity of sands and rocks from all around the world.
- Code documentation and article writing for paper publication.

Summer Intern

Saudi White Cement

June – July 2018 Saudi Arabia

- Training on security aspects of a production company - Tutored on N+ CompTIA course
- Hands on Experience of ERP (Enterprise Resource Planning) - Oracle Describing Cash Flow, Inventory & other major modules used in a manufacturing company.

PROJECTS

Deep Reinforcement Learning on AUVs - Final Year Project

Zakir Husain College of Engg. & Tech.

August 2020 India

Phase 1: Simulation of AUVs for detecting underwater pipeline defects using Reinforcement Learning.

Phase 2 - 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 AUV's

Autonomous Underwater Vehicle Club

January 2019 India

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

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

Camera tuning using Deep Reinforcement Learning

Zakir Husain College of Engg. & Tech.

December 2018 India

DRL used to tune white-balance settings of camera app according to the environment while taking pictures - **Minor Project - Junior year**

Tools & Libraries: Keras library, socket programming, CNN data set MobileNetV2, Android App programming (Java)

PUBLICATIONS

Effective thermal conductivity of unsaturated soils based on deep learning algorithm - [\[Link\]](#)
2nd International Conference on Energy Geotechnics
📅 November 2020 📍 La Jolla, California

Effective thermal conductivity of unsaturated sand using artificial neural network (ANN) and lattice element method (LEM) - [\[Link\]](#)
International Journal of Thermal Sciences
📅 February 2020

Estimation of seismic wave velocities of crustal metamorphic rocks using ANN - [\[Link\]](#)
Materials today: Proceedings
📅 December 2019 📍 Mathura, India

PATENTS

A low cost Autonomous Underwater Vehicle having five degrees of freedom and two thrusters
U.S. Patent Filing No. 15949553
📅 March 2018 📍 United States

6 Pin Underwater Electrical Connector
Indian Patent Application No. 201811027144
📅 July 2018 📍 India

LANGUAGE/SKILLS

C C++ Python Java MATLAB C# SQL
ROS 1 & 2 Gazebo Unity Blender Simulink
LabView Android Studio L^AT_EX Markdown
Photoshop CS6 Premiere CS6 Audition CS6

SCORES

English Proficiency Test
TOEFL iBT
📅 09 November 2019 📍 New Delhi, India
Highest Score: 96/120, Reading – 24/30, Listening – 22/30, Speaking – 25/30, Writing – 25/30.

WORKSHOPS/CONFERENCES

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

ACHIEVEMENTS

- 🏆 **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 Presentation**
"AUV Surveillance" at Inspiring Entrepreneurs Summit 2018, Saudi Arabia
- 🏆 **1st Prize in Mobile app Mock up competition by IEEE**
Made an app for foodies and food makers to share recipes - The Food Up app
- 🏆 **HackDTU Hackathon**
Implemented & showcased an online car parking system
- 🏆 **School Topper**
In high school, 1st position by scoring 96 % in Computer Science

STUDENT MEMBERSHIPS

- IEEE Oceanic Engineering
Zakir Husain College of Engg. & Tech.
📅 March 2019 📍 India
- Marine Technology Society
Zakir Husain College of Engg. & Tech.
📅 April 2020 📍 India

COURSES

- Self-Driving Cars with ROS 2 and Autoware – ApexAI
- Deep Learning A-Z™ – Hands on Artificial Neural Networks Proficiency course on Python - Udemy
- Programming for Robotics - ROS – By Institute of Robotics and Intelligent Systems, Robotics Systems Lab - ETH Zurich
- Artificial Intelligence for Robotics – Udacity

CO-CURRICULAR



Blood donation campaign organizer



Official Photographer of hall festival



First prize in photography competition in hall festival



Social Media manager at Recrufest 2018 - A Mega Job fair

REFERENCES

Prof. Dr.-ing habil. Frank Wuttke

Chair of Geomechanics and Geotechnics

@ Institute of Applied Science

✉ fw@gpi.uni-kiel.de

Institute of Applied GeoScience

The University of Kiel

Kiel-24118, GERMANY

Dr. Saleem Anwar Khan

Professor

@ Zakir Husain College of Engineering & Technology

✉ saleemanwar@zhcet.ac.in

Department of Mechanical Engineering

Zakir Husain College of Engg. & Tech.

Aligarh Muslim University

Aligarh-202002, INDIA

Dr. Rashid Ali

Associate Professor

@ Zakir Husain College of Engineering & Technology

✉ rashidaliamu@rediffmail.com

Department of Computer Engineering

Zakir Husain College of Engg. & Tech.

Aligarh Muslim University

Aligarh-202002, INDIA