

FAISHAL ZHARFAN

+6282117484903

zharfanf@gmail.com

Bandung, West Java. 40291

OBJECTIVE

Faishal Zharfan is seeking a research internship in Computer Systems, Multimedia Systems, and Computer Networking. He is a fifth-year Telecommunication Engineering student with a strong interest in these fields and a desire to learn and take on new challenges. His technical skills and experience make him a valuable candidate for a research internship.

EDUCATION

Bandung Institute of Technology

Bachelor of Engineering

School of Electrical Engineering and Informatics

Telecommunication Engineering

July 2019 - Present

Overall GPA: 3.70/4

University of Zagreb

Exchange Student

Faculty of Electrical Engineering and Computing

Electrical Engineering and Information Technology

Feb 2022 - Jul 2022

RESEARCH INTERESTS

- Computer Networking & Operating Systems
- Video Processing & Multimedia Systems
- Machine Learning & Cloud Computing
- Video Analytics & Deep Learning Systems
- Communication Systems & Information Theory

TECHNICAL STRENGTHS

Computer Languages

Python, C, C++, Bash, MATLAB/GNU Octave

Software & Tools

Linux, LaTeX, Tensorflow, HTML, CSS, Excel, HFSS

Languages

Indonesia (Native), Sundanese (Native), English (Advanced)

EXPERIENCES

International Research Collaboration on Video Analytics

Oct 2022 - Present

Undergraduate Advisor: Prof. Ir. Hendrawan, M.Sc., Ph.D.

- Working as undergraduate researcher under Garuda ACE programme and collaborating with Prof. Junchen Jiang along with Prof. Haryadi Gunawi from UCARE Lab, University of Chicago.
- Implement Concierge, an accuracy-sensitivity based resource allocator designed for object detection systems
- Explore the behaviour of videos' f1-score with according to its bitrate
- Perform simulation using modified DDS and AWStream video applications

Bandung Institute of Technology

Jan 2023 - May 2023

Lab Assistant Coordinator

- Lead a team of 7 assistants for Computer Networks I Lab course (ET3111)
- Arrange 3 sessions of lab exercise, including schedule arrangement and module writing
- Create the final exam problems and grade students works

Bandung Institute of Technology

Apr 2022 - Dec 2022

Undergraduate Research Assistant

- Work with Professor Trio Adiono who heads IC Design Lab ITB focused on Deep Learning for Communications in 5G Era
- Design a smart wireless ofdm system with deep learning-based modulation detection
- Establish experiment to measure out the performance using Adalm Pluto

Bandung Institute of Technology

Aug 2021 - Dec 2021

Teaching Assistant

- Teaching Assistant for Programming Course (ET2107)
- Give tutorial on basic programming and data structures
- Grade students exam and exercises

PUBLICATIONS

Modelling of Wireless OFDM System with Deep Learning-based Modulation Detection
2022

Rahmat Mulyawan, Faishal Zharfan, Muhamad Rizki Nur Rahman, Infall Syafalni, Nana Sutisna, Trio Adiono

2022 International Symposium on Electronics and Smart Devices (ISESD)

Comparison of Caching Replacement Policies in Changing the Number of Interest Packets on Named Data Networks Using Mininet-NDN 2021

Faishal Zharfan, Larastya Devindira Hasnaa, Nana Rachmana Syambas, Ridha Muldina Negara

15th International Conference on Telecommunication Systems, Services, and Applications (TSSA)

PROJECTS

ESI Filter

Aug 2021 - Jan 2022

- Design a bandstop filter that capables to attenuate at 3.2 - 3.7 GHz using Rogers material
- Perform simulation using HFSS and measurement using VNA

Water Quality Checker System

Dec 2021 - Feb 2022

- Design an IoT system to check water quality system using arduino uno
- Design a communication protocol to notify the user
- Integrate and optimize each module codes

ACTIVITIES

Huawei Seeds for The Future 2022

Aug 2022

Indonesia Representative

- Selected along with 9 others Indonesia delegations to attend Huawei Seeds for The Future 2022 in Bangkok, Thailand
- Participate in Tech4Good competition, we propose CanTing, a stunting early detection system
- Explore various huawei technologies such as AI, 5G, Cloud computing, etc

HONORS

Fellowship Awardee - Summer of Reproducibility, UC Santa Cruz (2023)

Scholarship Awardee - Erasmus+ International Credit Mobility (2022)

Scholarship Awardee - Electrical Engineering Alumni Association (2022)

ACHIEVEMENTS

Third Winner - Huawei ICT Competition on Network Track at Global Level (2023)

Second Winner - Huawei ICT Competition on Network Track at Regional (Asia-Pacific) Level (2023)

First Winner - Huawei ICT Competition on Network Track at National Level (2022)

Second Place - Most Outstanding Student of Telecommunication Engineering, ITB (2022)

Honorable Mention - Huawei ICT Competition on Cloud Track at Campus Level (2020)

CERTIFICATES

Huawei Certified ICT Associate : Datacom (2022-2025)

Huawei Certified ICT Associate : Cloud Service (2020-2023)

Cisco Cybersecurity Essentials (2020 - no expiration date)

Duolingo English Test : 125 out of 160 (C1/Advanced)

RELEVANT COURSES

Core Courses

Multimedia Systems - A
Artificial Intelligence & Big Data - A
Computer Networks I & II - A
Discrete-Time Signal Processing - A
Advanced Programming - A

Other Courses

Calculus I & II - A
Discrete Mathematics - A
Probability and Statistics - AB
Quantum Information Theory - on going
Communication Systems - A