

NAZIR NAYAL

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EDUCATION

Universität des Saarlandes Sept 2024 - Aug 2027
Doctor of Philosophy - PhD, Computer Science. Saarbrücken, Saarland, Germany

- Part of the CS@Max Planck Doctoral Program

Koç University Sept 2021 - Sept 2023
Master of Science, Computer Science and Engineering. Istanbul, Turkey

- Funded by KUIS AI Center and Newton Advanced Fellowship (Royal Society UK)

Koç University Sept 2017 - June 2021
Bachelor of Science, Computer Engineering Senior. Istanbul, Turkey

- Full scholarship funded by Al Ghurair Foundation (AGFE).

RESEARCH INTERESTS

- Computer Vision, Video Understanding, Open-World Learning, Uncertainty Estimation, Multi-Modality.

PUBLICATIONS

- N. Nayal, M. Yavuz, J. F. Henriques F. Güney "RbA: Segmenting Unknown Regions Rejected by All" in ICCV 2023.
- Y. Hassanzadeh-Nazarabadi, N. Nayal, S. Sameh Hamdan, Ö. Özkasap, and A. Küpçü, "A containerized proof-of-concept implementation of lightchain system," in ICBC. IEEE, 2020.
- Y. Hassanzadeh-Nazarabadi, N. Nayal, S. Sameh Hamdan, A. Utkan Şahin, Ö. Özkasap, and A. Küpçü, "Demo: Skip Graph Middleware Implementation", in SRDS 2020.

EXPERIENCE

Max Planck Institute of Informatics (MPI-INF) Sept 2024 - Present
Doctoral Researcher Saarbrücken, Saarland, Germany

- Working with the Computer Vision and Machine Learning Group

Visual Geometry Group (VGG), University of Oxford Sept 2023 - Oct 2023
Graduate Short Term Student Visitor Oxford, United Kingdom

- Visited VGG as part of our project collaboration with João F. Henriques.

Koç University & İş Bankası Artificial Intelligence Center (KUIS AI) Sept 2021 - Sept 2024
Research Fellow Istanbul, Turkey

- Worked on detection of rare events and unknown objects in Autonomous Driving scenarios.

Unvest R&D Center April 2022 - Sept 2024
Research Engineer Istanbul, Turkey

- Explored the potential of deploying uncertainty estimation models for autonomous driving.

Hospital on Mobile (now CareX.ai) Jan 2021 - June 2021
AI Engineer Remote

- Conducted research and developed AI models for vital signs prediction.

Invent Analytics July 2020 - Sept 2020
Software Engineering Intern Istanbul, Turkey

- Implemented a machine learning forecasting model based on supermarket products sales data.

Distributed Systems and Reliable Networks Laboratory (DISNET) Mar 2019 - Jan 2021
Research Intern Istanbul, Turkey

- Implemented Proof of Concept for LightChain, and an augmented version of Skip Graph Data Structure.

Dapper Labs (Based in Vancouver, Canada) Aug 2019 - Dec 2019
Software Engineering Intern Remote

- Contributed to the implementation of the first version of the networking layer of Flow Blockchain.

ACHIEVEMENTS

Al Ghurair Foundation for Education STEM Scholarship (AGFE) Sept 2017 - Sept 2021
Recipient *Istanbul, Turkey*

- A merit-based award for highly achieving Arab students to pursue a degree in STEM.

Vehbi Koç Scholar Award 2018 - 2019 - 2020 - 2021
Award Recipient *Istanbul, Turkey*

- Received this award for 4 consecutive years for maintaining a semester GPA of 3.5+.

IEEEExtreme 13.0 Programming Contest Oct 2019
Contestant *Online*

- Ranked 67th globally and 2nd among teams participating from Turkey.

Turkish Programming Contest (TPC) Sept 2019
Contestant *Istanbul, Turkey*

- Represented Koç University and ranked 12th among teams participating from all over Turkey.

SKILLS

- **Technical:** C++, Python, Pytorch, Deep Learning, Agile Development, Algorithms & Data Structures, Competitive Programming, Data Analysis, Blockchain.
- **Languages:** Arabic (native), English (fluent), French (intermediate), Turkish (intermediate).

PROJECTS

For list of projects you may visit project page in my website.

EXTRACURRICULAR ACTIVITIES

Koç University Programming Championship (KUPC) January 2020 - September 2020
Problem Setter & Chief Judge *Istanbul, Turkey*

- KUPC is an ACM-ICPC style programming competition for Koç University students.
- Created and tested problems, and prepared competition system.

Koç University ACM Student Chapter (KUACM) May 2019 - August 2020
Vice President *Istanbul, Turkey*

- Managed and organized programs and activities carried out under that chapter's supervision.

Koç University Algorithms Program (KUAP) January 2019 - September 2020
Founder & Coordinator & Instructor *Istanbul, Turkey*

- Created a curriculum that covers basics of problem solving using algorithms and data structures.
- Led discussions and problem solving sessions demonstrating concepts and solutions to problems.

inzva Algorithmic Competition Winter Camp 2019 January 2019
Participant & Contestant *Istanbul, Turkey*

- Ranked 1st in final day contest after a week long intensive training on algorithms and data structures.