

Amir Mohammadi

Mechatronics student

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Github: <https://github.com/kevicrypt>

Blog: <https://kevi-daily-blog.vercel.app>

EDUCATION

Mechatronics (M.Sc)

FAU Erlangen-Nürnberg

10/2022 – Current

GPA: 1.7 (German grading system)

Mechanical engineering (B.Sc)

University of Tehran

08/2015 – 09/2019

Thesis: Regulating the pressure in a hydraulic circuit using nozzle flapper method

GPA: 16.44/20

EXPERIENCE

11/2019 – 08/2022

3 years

Mechanical engineer | Tarang Co. (Road Construction)

Responsible for measurement and analysis of projects

CAD-Design of mechatronic components used in projects

05/2018 – 08/2018

3 months

Intern | Electric Khodro Company (EKS)

Intern in the Research and Development area

Working with digital signal processing (DSP) devices

09/2018 – 12/2018

3 months

Teacher assistant | Design of Machine Elements

Assist the course instructor in preparing and delivering exercise sessions

Provide individualized assistance to students

04/2023 – current

Tutor | MATLAB Laboratory

Support the instructor in the preparation and delivery of MATLAB lab sessions

09/2023 – current

Working student | IAV GmbH

Develop Matlab applications for test and measurement

Model automotive-related designs using Simulink

PROJECTS

Developing an elderly falls scenario information app

Python is used as main language of the application

The data is collected by a Gyroscope using a smartphone

The algorithm is trained using PyTorch library

Pressure control via nozzle flapper geometry

Matlab Simulink is used for simulating the Regulator

The main method is nozzle flapper mechanism

08/2023 – 11/2023

Product development of 3D-MID

Develop a c++ framework for automating the implementation of

mechatronic integrated devices CAD files

Programming languages

Python / C++ / MATLAB / JavaScript

CAD Design

CATIA / Solidworks / Siemens NX

Robotics and Machine Learning

Arduino / Numpy / Pandas / ROS / Matplotlib

Simulink

Web development

Html, Css, NextJS, NodeJs,

Express, MongoDB, SQL

Languages

Persian: Native

English: C1 (TOEFL 98)

German: C1 (TestDaF 19)

Spanish: A1

Interests

Mechatronics and Robotics

Robot mechanisms and interfaces

Machine learning

Robotics and Automation