

# Sasan Vahidinia

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in Sasan-Vahidinia  
🌐 Sasanvhn

## Research Interests

- Algorithms and Optimization
- Explainable Artificial Intelligence
- Big Data Analytics
- Deep Learning

## Education

2018–2023 **Bachelor's**, Shiraz University, Shiraz - Iran, *Computer Engineering*  
GPA: 3.05/4 (15.51/20)

## Honors

- **Top-tier ranking** in the Iranian university entrance exam, surpassing 98.5% of over 144,500 participants
- Received a **national undergraduate full scholarship**.

## Academic Projects

- **Document Formatting Automation System Using Python**  
Essay/Paper formatting checker based on university standards.
- **Implementation of Circular-Rotation Mode in Verilog and Python**  
The circular-rotation mode of the CORDIC machine was to be implemented on FPGA, simulated in Python and written in Verilog.
- **Implementation of MIPS CPU in Xilinx**  
a complete CPU with MIPS architecture
- **Temperature Monitoring System Using C**  
Controlling/Regulating the temperature of a particular environment using AVR micro-controllers.
- **Implemented Linear Regression, Gradient Descent, Logistic Regression, Bayes Classifier in Python**
- **Cisco Device Security Configuration Lab Exercises Using Cisco Packet Tracer**
- **Implementation of Python to C Compiler in Python**
- **Scheduling Algorithm for Operating System in Java**
- **Elementary Blockchain Implementation in Python**

- **Patients, Hotel Management Systems and Web Based Remote Teaching/Conferencing System in Java, Flutter and Python**

## Courses

- Artificial Intelligence (B+)
- Numerical Analysis Methods (B+)
- Statistical Analysis (A)
- Principles of Operating System Design (A)
- Computer, Logic Circuit, Computer Arc., Microprocessor Labs (Ranked 1<sup>st</sup>)
- GPU Programming

## Teaching Experiences

Fall 2022 **Teaching Assistant for Principles of Database Design**

## Industry Experiences

Spring 2023 **Back-End Developer, Top Super Application**

Worked on a platform for a wide range of tourism, financial, automotive, and tech services using FastAPI

Summer 2022 **Android Developer, Software Development Laboratory at Persian Gulf University**

Implemented a local Twitter clone with Flutter

## Test Scores

- **IELTS:** 7.0 (L: 8.0, R: 7.5, W: 6.0, S: 7.0))

## Technical Skills

- **Programming Languages:** Python, Java, C, C++, Verilog, Django, Flutter, FastAPI, Javascript, Microsoft, SQL server.
- **Libraries:** Tensorflow, PyTorch, NLTK, OpenCL, pthreads, CUDA, OpenMP.
- **Miscellaneous:** gcc, Git, AndroidStudio IDE.