

HALIME PEHLIVAN

Software Developer

+4915510203822 @ phlvnhalime@outlook.com
Linkedn: Halime Pehlivan (https://www.linkedin.com/in/halime-p-a93326162/) github: phlvnhalime
Heilbronn, Germany



SUMMARY

Analytic-minded Full-Stack Developer Candidate with a strong foundation in C/C++ and systems automation. Proven ability to leverage Mechanical Engineering background for robust mathematical modeling and complex algorithmic problem-solving in software development. Experienced with C/C++, Python, TypeScript, and relevant web technologies (HTML/CSS), aiming to specialize in Back-End systems and high-performance applications. Eager to rapidly acquire new expertise and contribute to high-growth engineering teams.

SKILLS

Core Programming & Data Engineering

MATLAB	C#	Python (Automaton/Data Processing)				Algorithmic Problem Solving		Shell Scripting
C Programming		C++	HTML	CSS	Typescript	Mathematical Modeling		System Analysis
Sustainable Coding Practices								

DevOps & System Tools

Docker	LLDB/GDB (Debugging)	Git (Version Control & CI/CD Pipelines)	Unix/Linux Environments
Shell Scripting			

EXPERIENCE

- 01/2023 - 01/2024

Istanbul, Türkiye

Research and Development Engineer

TMS Industrial Refrigeration Inc

 - Architected and developed in-house automation tools using Python and C# to streamline complex capacity calculation and equipment selection processes for customized HVAC/R systems.
 - Performed computational fluid dynamics (CFD) analysis (COMSOL) to validate and optimize fan cell geometry, enhancing internal fan efficiency.
 - Applied principles of data processing and system sizing to optimize cooling load analysis, driving performance and cost efficiency.
 - Utilized SolidWorks and SolidWorks Composer for patent development studies and advanced design visualization.
 - Prepared P&IDs (Piping and Instrumentation Diagrams) of cooling systems using AutoCAD and developed design documentation to support feasibility, concept, and detailed design phases.
- 04/2021 - 09/2022


Istanbul ,Türkiye

Mechanical Engineer


ONUK-BG Industrial Defence Inc

 - Reduced human error by {25%} and improved setup accuracy by developing NC code tracking and optimization system.
 - Optimized NC code programming (Siemens/Fanuc compatible) for 3-axis and 5-axis systems, which drastically streamlined tool path deployment and increased operational efficiency.

ACTIVITIES

- **Heilbronn Assistance Team Member at 42 Heilbronn**

07/2025 - 08/2025

Actively contributed to the **peer-to-peer learning model** by serving as an Assistance Team Member. **Mentored and guided** peers on project methodologies and technical challenges. **Managed the onboarding and integration** of new student cohorts, ensuring rapid adaptation to the intensive learning environment. **Coordinated educational events** to foster a **collaborative and high-performing learning community**.
- **Mechanical Team Mentor @Grizu-263**

2020 - 2022

Led and mentored the mechanical team through the full lifecycle of CubeSat development, focusing on **system integration** and **interdisciplinary coordination**. Applied **MATLAB** for **simulation and modeling** of orbital mechanics and critical **deployment systems**. Managed the implementation of **data collection** protocols and **control algorithms** critical for mission success.

EDUCATION

- 08/2016 - 02/2021
Türkiye

•

Bachelor of Science Mechanical Engineering
Zonguldak Bülent Ecevit University of Faculty of Engineering
- 07/2024 - Present
42 Heilbronn

•

Software Developer
42 Heilbronn
 - Developed in-depth **C, C++, and Unix/Linux system programming skills** through a peer-to-peer, project-based learning model.

CERTIFICATION

- MBSE: Model-Based Systems**
University at Buffalo, Coursera

Digital manufacturing & design
University at Buffalo, Coursera
- ATEX Training**
IEP ENERGY PETROLEUM INSTITUE

AWARDS

- **2nd Place in Hackathon**
2025
- **1st Place in TURKSAT Model Satellite Competition**
2019 - 2020
- **2nd Place in NASA CanSat Competition**
2018 - 2020

LANGUAGES

- English
- C1
- German
- B1
- Turkish
- Native