HALIME PEHLIVAN
Research And Development Engineer

📞 +4915510203822   @ phlvnhalime@outlook.com

🔗 **LinkedIn: Halime Pehlivan (https://www.linkedin.com/in/halime-p-a93326162)**   🔗 **GitHub: phlvnhalime**

📍 **Heilbronn,Germany**   📅 **30.11.1998**

SUMMARY

Mechanical Engineering Professional with a strong foundation in high-precision **CAD/CAE tools (CATIA, SolidWorks)** and extensive project experience in complex system design. Proven ability to translate complex physical processes (Cooling Systems, Naval Defense Systems) and **engineering calculations** into robust mechanical constructions and integrated low-level control systems, utilizing **Python and C/C++ environments**. Seeking to leverage expertise in **system architectures** and **advanced design principles** to drive efficiency by **integrating specialized engineering software solutions and automation** into the design lifecycle. Eagerness to rapidly acquire new expertise in analysis and distributed systems to deliver robust solutions within a high-growth engineering team

SKILLS

CAD/CAE Tools

Catia, AutoCAD, SolidWorks, ANSYS (CFD), COMSOL (CFD), Fusion360(Manufacturing Process)

Core Programming & Data Engineering

MATLAB, C#, Python (Automaton/Data Processing), Algorithmic Problem Solving, Shell Scripting, C Programming, C++, HTML, CSS, Typescript

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 improved design documentation to support feasibility, concept, and detailed design phases.

04/2021 - 09/2022

Istanbul ,Türkiye

Mechanical Engineer
ONUK-BG Industrial Defence Inc

- Developed the design and construction of mechanical components for **Naval Defense Systems** using **CATIA, AutoCAD, and Fusion 360**.
- Applied in-depth materials knowledge, focusing on **aluminum alloys** and high-performance materials, for critical component development and to optimize weight-performance ratios.
- Improved an **NC code tracking and setup optimization system** to monitor toolpaths and operational parameters, resulting in enhanced setup accuracy and significant reduction in human error.
- 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

Led technical onboarding and provided structured guidance to new cohorts, enhancing rapid adaptation to intensive project methodologies. **Mentored and guided** peers on project methodologies and technical challenges. **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 ● Bachelor of Science Mechanical Engineering

Türkiye **Zonguldak Bülent Ecevit University of Faculty of Engineering**

07/2024 - Present ● Software Developer

42 Heilbronn **42 Heilbronn**

- Improved software development skills through a **peer-to-peer learning** and **project-based approach.**
- Focused on **C, C++, and Unix/Linux environments** to acquire technical and collaborative skills that meet industry expectations.

CERTIFICATION

ATEX Training

IEP ENERGY PETROLEUM INSTITUE

Digital manufacturing & design

University at Buffalo, Coursera

MBSE: Model-Based Systems

University at Buffalo, Coursera

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