## Curriculum Vitae/Resume

## CIHANSER CALISKAN

## Computer Engineering Graduate Program

 $+90\ 501\ 548\ 17\ 33\ \diamond\ cihansercaliskan@gmail.com\ \diamond\ Website$ 

#### Education

Yasar University M.Sc. Computer Engineering

Jun 2023
GPA: 3.65/4.00

 $The sis:\ Optimization\ Problems,\ Heuristic\ Algorithms,\ Artificial\ Intelligence$ 

Jun 2020

Yasar University B.Sc. Computer Engineering Focus: Artificial Intelligence, Computer Graphics

GPA: 2.98/4.00

## Research Experience –

## Multi-Objective Optimization for Job Shop Scheduling Problems Researcher Jul 2024 - Present

- Adapting and extending the self-adaptive genetic algorithm from a previous study on permutation flow shop scheduling to solve complex multi-objective job shop scheduling problems.
- Developing new heuristic approaches to manage the trade-offs between conflicting objectives (e.g., minimizing makespan and total tardiness).
- Aiming to publish the findings as a full article in a high-impact, peer-reviewed scientific journal.

## Graduate Thesis Research - Solving Job Scheduling Problem Researcher Sep 2022 - Jun 2023

- Developed heuristic and genetic algorithms for solving permutation flow shop scheduling problems.
- Applied artificial intelligence and evolutionary computation techniques to optimize scheduling performance.
- $\bullet$  Published results in IEEE ICEEE 2023 conference proceedings.

# Undergraduate Thesis Research - POF: Performance Optimized Fluids Researcher Sep 2019 - Jun 2020

- $\bullet \ \ {\rm Worked\ on\ simulation\ techniques\ and\ optimization\ strategies\ for\ fluid\ systems\ using\ custom\ algorithms.}$
- Developed performance optimization methods for computational fluid dynamics applications.

#### **Publications** -

C. Çalışkan and K. Erdoğdu. Self-adaptive genetic algorithm for permutation flow shop scheduling problems. In 2023 10th International Conference on Electrical and Electronics Engineering (ICEEE), pages 207–213, Istanbul, Turkey, 2023. IEEE. doi: 10.1109/ICEEE59925.2023.00045.

## **Professional Experience -**

Veripark Senior Backend Developer

Jul 2024 – Present

*Izmir*, *Turkey* 

- Designed and maintained scalable backend systems in financial technologies.
- Collaborated with Akbank teams ensuring security and performance in critical banking solutions.
- Developed high-performance financial software solutions with focus on reliability and security.

**Doruk Automation** Senior Software Developer

Jan 2021 – Jul 2024

Izmir, Turkey

- Developed MES/MOM systems to support Industry 4.0 operations.
- Implemented real-time data collection and visualization pipelines.
- Led software development projects for industrial automation and manufacturing execution systems.

## **Technical Skills -**

Web & FrameworksREST, SOAP, ASP.NET, Web API, .NET, MVC, WCFTools & TechnologiesGit, Azure, Unity, Bootstrap, Visual Studio, Azure DevOpsConceptsOOP, CI/CD, SDLC, AI, ML, Optimization Algorithms

Platforms Windows, Linux

Languages Turkish (Native), English (Advanced) – Duolingo English Test: 125/160

(Certificate), German (Beginner)

## Selected Course Work -

## AI & Algorithms

Advanced Artificial Intelligence Artificial Neural Networks Evolutionary Computation Metaheuristic Optimization

Modern Heuristics

Algorithm Analysis & Complexity

#### **Mathematical Foundations**

Advanced Linear Algebra Probability and Statistics Advanced Information Theory

Automata Theory

Discrete Computational Structures Research Methods & Ethics

## Systems & Applications

Internet of Things Embedded Systems

Object-Oriented Programming

Data Structures I & II

Logic Design

Computational Methods