Can Bekiroğlu

AI & Full Stack Software Developer (Working Student) / Computer Engineering Student

Computer Science Student | Looking for a Working Student Position in Software Development Date of Birth & Place: 2003, Kocaeli (Gebze) | **Nationality:** Turkish

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SKILLS

Agentic AI

• LangChain, OpenAI API (Whisper, TTS (Text to Speech), GPT-4o), Prompt Engineering, Cursor, Test Development, CI/CD, LLM, Agent Orchestration

MS-Office-Fähigkeiten

• Excel, Word, PowerPoint, Outlook, VBA, M365

Python

• Pandas, Numpy, Seaborn, Matplotlib, Scikit-learn, Flask, FastAPI, Selenium, BeautifulSoup, Scrapy, Geocoding & Reverse Geocoding API (OpenStreetMap)

C/C++

• CMake, OpenGL, STD, Raytracing, Vector, GCC, Boost

Webentwicklung

• HTML, CSS, JavaScript, Node.js, TypeScript, Tailwind CSS, Next.js, Framer Motion, React

Gemeinsame Fähigkeiten

• Teamarbeit, IT-Beratung

EDUCATION

B.Sc. Computer Engineering (Informatik)
University of Duisburg-Essen

10/2022 - Present   *6th Semester (107 ECTS)*

Courses

- Core Modules: Computer Architecture, Computer Networks, IT Security, C/C++, Data Structures & Algorithms, DBMS (Database Management Systems), SQL, XML, CBEM (Computer-Based Engineering Mathematics), AFS (Automata and Formal Languages) *(Focus: Software Engineering)*
- Common Modules: Math1&2, Measurement Technology, Physics, Network Analysis, Fundamentals of Computer Engineering, Logical Design of Digital Systems, Procedural Programming.
- Elective: Electronic Business, Logic.

Freshman Institute – FH Aachen
FH Aachen (Aachen Applied Science Univeristy)

10/2021 - 08/2022   *Geilenkirchen / Germany*

Courses

- Computer Lab: HTML, CSS, JavaScript, PHP, Python, MySQL
- Development of a **Game Website** locally with backend in PHP, frontend purely with CSS and mathematical calculations in JavaScript (project awarded as one of the best among 10 gaming projects)
- Development of a **Restaurant Website** with menu cards purely for practice in HTML and CSS from scratch.
- **MS Office Skills:** Excel, Word, PowerPoint, Outlook *(practical lab sessions every week).*

WORK EXPERIENCE

Working Student – Data Analysis
Monay

10/2023 - 12/2023   *Istanbul, Türkiye (Hybrid)*
FinTech Company

Achievements/Tasks

- Conducted **data analysis** using Python, Pandas, MongoDB, and PostgreSQL to derive business-relevant insights.
- Applied **Machine Learning methods** to optimize data-driven decision-making processes and support prediction models.
- Created **reports and visualizations** that enhanced strategic planning and performance evaluation across various IT branches.

Contact : Halil İbrahim Ceneli (Senior) | Özlem Denizmen (Founder of Monay) - linkedin.com/in/halilibrahimceneli | linkedin.com/in/ozlem-denizmen-67527b1

Working Student – IT Infrastructure
Altinsoy Manufacture & Priorim GmbH

02/2023 - 06/2023   *Düsseldorf, Germany*
Automotive and Furniture Trade

Achievements/Tasks

- Supported **IT infrastructure tasks** , including website configuration and technical setup for production environments.
- Collaborated within a hybrid working team to ensure system reliability and seamless implementation of IT solutions.
- Gained experience in **HTML** , **IT infrastructure management** , and **interdisciplinary communication** across real projects.

SKILLS

Datenbank, DevOps, CI/CD, Cloud & Deployment

• Github Actions, SQL, MongoDB, PostgreSQL, Supabase, Cloudinary, Docker, Kubernetes, Vercel, Microsoft Azure

Methodologies

• Agile methodology, Scrum Framework, Spring Planning, Kanban, Jira , Lean Principles

IT-Sicherheit / Cybersecurity

•Kali Linux, Pentesting, Burpsuite, JWT, Nmap, Metasploit, Hydra, Wireshark, Aircrack NG

LANGUAGES

English
C1 | Fluent

German
C1 | Fluent

Turkish
Native

PERSONAL PROJECTS

Agentic Workshop Trainer (agentic-workshop.vercel.app)

- Development of an **AI-driven interview & workshop training platform** with Next.js, TypeScript, OpenAI API (GPT-4o, Whisper, TTS) and **real-time speech recognition + text-to-speech**.
- Built a **multi-agent architecture** using LangChain (roles: Interviewer, Customer, Evaluator) with adaptive conversation control and context tracking.
- Implemented **hybrid voice architecture** using Web Speech API and OpenAI Realtime API (future updates include bidirectional audio streaming via WebSocket proxy server).
- Developed evaluation methods and created **technical documentation & optimization reports** for **Agentic AI prototypes** .
- Built a **5-dimensional evaluation system** (Content, Communication, Structure, Empathy, Goal) with CI/CD-enabled **PDF generation (jsPDF)** .
- Implemented **robust authentication and database architecture** via **Supabase Auth** , Row Level Security (RLS), and **PostgreSQL schemas** .
- Evaluated various **agent frameworks** (LangChain vs. Custom Orchestration) and documented **session cost estimations** (~$0.13 per session including TTS/Voice I/O).
- **Tech Stack:** TypeScript, Next.js 15 (App Router, Server Actions), OpenAI API (GPT-4o, Whisper, TTS, Realtime API), Supabase (PostgreSQL, Auth), Web Speech API, WebSocket, Tailwind CSS, jsPDF, shadcn/ui, Playwright, Vitest, GitHub Actions.
- **Live Deployed:** agentic-workshop.vercel.app

Lieferspatz-N3XT (lieferspatz-n3xt.vercel.app) (02/2025 - 10/2025)

- Design and implementation of a **full-stack delivery platform** using Next.js, TypeScript, Tailwind CSS, Prisma, and PostgreSQL.
- Built **JWT-based authentication** and a dynamic warehouse system with **real-time CRUD operations** and scalable UI/UX.
- Integrated **Leaflet OpenStreetMap** for **geolocation** and **reverse-geocoding API** to calculate restaurant–customer distance.
- Developed backend functionality for **distance calculation** between restaurants and customers.
- **Live Deployed:** lieferspatz-n3xt.vercel.app

Headshotify (locally working n8n automated web system) (08/2025 - 09/2025)

- Headshotify automatically generates **professional LinkedIn headshots** from user-uploaded photos.
- Built with a **simple n8n webhook workflow**, triggered automatically when the user uploads an image.
- **Average usage cost:** €0.07 per run (using OpenAI API).

SmartUDE (smartude.vercel.app) (06/2025 - 07/2025)

- Developed **SmartUDE** , a support platform for international students at the University of Duisburg-Essen, with modules for checklist, campus map, housing, and student document uploads.
- Built a **responsive, mobile-friendly app** with **Supabase authentication** , persistent storage, and smooth onboarding UX (developed with React Native).
- **Live Demo:** smartude.vercel.app

Regression Analysis on MATLAB for CBEM LAB (07/2024 - 08/2024)

- **Feature Engineering & Preprocessing:** Transformation of raw data (CSV → MAT, log transformation, generation of mdata1/mdata2) for model preparation.
- **Machine Learning Regression Models:** Implemented **MCF regression pipelines** using basic functions as features and **QR decomposition (LAQR)** for parameter estimation.
- **Evaluation & Visualization:** Model evaluation with R^2 metrics (0.89–0.90); 2D/3D visualization of multiple steels (100Cr6, C15, S60) → **Video presentation result: Grade 1.3**

Cybersecurity with Kali Linux (01/2024 - 05/2024)

- Gained **hands-on experience** in security analysis and pentesting workflows in a controlled, ethical environment.
- Conducted **hash algorithm analysis** and **password audits** (offline test environments).
- Created **network scanning packages** to identify vulnerabilities and analyze authentication/connection patterns.
- Tested vulnerability identification tools (e.g., Nmap, Wireshark, Burp Suite) with adherence to **ethical standards** .

C++ Lab Project at University (11/2023 - 02/2024)

- Developed a **complex object-oriented software system** simulating a household device ("House → Device → Consumer/Producer").
- Implemented **data processing and file I/O** for efficient input/output stream management.
- Used **CMake, GCC, and OpenGL** for modular visualization and ray-tracing algorithms (PPM/PNG output).
- Strengthened proficiency in **C++20, STL, smart pointers, and memory management** to ensure stability and performance.
- Documented and tested all code systematically, maintaining **quality assurance and version control**.