

GÜRBÜZ DEMİROĞLU

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EDUCATION

Boğaziçi University — M.S. in Software Engineering (Non-Thesis) İstanbul, Türkiye

- GPA: 3.48 / 4.00
- Graduate project: **DodoLang**, an interpreted programming language implemented in Rust — lexer, recursive-descent parser, abstract syntax tree, tree-walking evaluator, scoped environments, and REPL.

Boğaziçi University — B.S. in Physics İstanbul, Türkiye

TECHNICAL SKILLS

Languages: Python, C#, Rust

Frameworks & Engines: Django, Unity

Enterprise & Cloud: IBM API Connect, IBM DataPower, IBM Cloud, Microsoft Azure authentication

Engineering Practice: REST API design, identity and authentication integration, DevOps and CI/CD workflows, Git/GitHub, code review, technical debugging at production scale

Product & Analytics: Firebase, AppsFlyer, Unity LevelPlay, A/B and cohort analysis, retention and funnel instrumentation

PROFESSIONAL EXPERIENCE

DodoLabs — Co-Founder & Game Developer Oct 2021 – Present

İstanbul, Türkiye

- Co-founded an independent mobile game studio; built 30+ playable prototypes, three soft-launched titles, and two commercially released games totalling more than four million downloads.
- Developed and shipped **Boat Evolution** in partnership with publisher Supersonic Studios; the title has surpassed 3 million Google Play downloads.
- Independently released **Alien Escape** under the DodoLabs account, approaching 1 million downloads with end-to-end ownership of publishing, compliance, and live operations.
- Designed production Unity/C# architecture covering gameplay systems, progression and economy design, UI, addressable content delivery, and automated build pipelines.
- Integrated advertising mediation, in-app purchases, mobile attribution, analytics, and audio middleware across iOS and Android release channels.
- Ran quantitative iteration cycles on CPI, D1/D7 retention, session length, and funnel drop-off; collaborated with publishers including Voodoo and Supersonic Studios to validate concepts through live market testing.
- Managed store submissions, SDK migrations, platform policy compliance, and production incident troubleshooting for a live user base.

IBM — Lab Services Consultant, API & Integration Specialist Jul 2018 – Aug 2020

İstanbul, Türkiye, and international client sites

- Served as an API and integration subject-matter expert for enterprise clients deploying IBM API Connect and IBM DataPower, covering architecture, implementation, and production problem-solving.
- Designed custom technical solutions where standard product configurations were insufficient, working directly alongside client engineering teams to diagnose and resolve blocking issues.
- **UK Met Office:** integrated Microsoft Azure authentication methods with IBM API Connect to satisfy identity and access requirements in a complex hybrid environment.
- **Santander UK:** developed a custom approach enabling DevOps automation to operate across IBM API Connect and adjacent products, resolving a problem that had resisted earlier attempts.
- Contributed to API infrastructure for Istanbul Airport, a business-critical platform handling tens of millions of API calls per day.
- Delivered technical guidance and client training on cloud architecture, API management, integration patterns, and business process automation.

IBM — Cloud Developer Advocate Oct 2017 – Jul 2018

İstanbul, Türkiye

- Supported developers and enterprise clients in adopting IBM Cloud technologies through technical workshops, product demonstrations, conference sessions, and hands-on engineering support.
- Designed and delivered recurring IBM Cloud and chatbot development workshops for mixed developer and business audiences.
- Built sample applications and educational material that translated cloud and API concepts into working reference implementations.
- Collaborated with engineering, sales, and consulting teams on customer proofs of concept and complex integration questions.

Freelance (Self-Employed) — Python Backend Developer Oct 2015 – Oct 2017

İstanbul, Türkiye

- Delivered backend services and web applications in Python and Django for independent clients, covering REST API design, relational data modelling, authentication, and deployment.
- Owned each engagement end to end — scoping, estimation, implementation, debugging, and ongoing production support — establishing the backend foundation later applied to enterprise API consulting and product engineering.

PROJECTS & OPEN-SOURCE CONTRIBUTIONS

DodoLang — Interpreted Programming Language in Rust github.com/jrqc/dodolang

- Implemented a complete language pipeline from scratch in Rust: tokenizer, lexical analysis, recursive-descent parser, abstract syntax tree, tree-walking evaluator, lexically scoped environments, and an interactive REPL.
- Modelled recursive AST structures using Rust enums under ownership and borrowing constraints; served as the capstone project for the M.S. in Software Engineering.

Rust Clippy — Contributions to the Rust Toolchain rust-lang/rust-clippy

- **PR #5903 (merged, Aug 2020):** corrected a false positive in the `needless_return` lint; iterated through maintainer review across seven commits with accompanying test coverage.
- **PR #6328 (reviewed, closed Feb 2021):** proposed `not_exhaustive_enough`, a lint identifying reachable catch-all match patterns that can conceal missing explicit arms. Maintainers concluded the behaviour belonged in the Rust compiler as an allow-by-default lint, leading to a follow-up `rust-lang/rust` issue.

Shipped Mobile Products — Unity / C# [Google Play](#)

- **Boat Evolution** (published with Supersonic Studios) — 3M+ downloads; evolution/progression mechanics with full analytics, advertising, and attribution integration.
- **Alien Escape** (self-published, DodoLabs) — approaching 1M downloads; independent release covering gameplay production, monetisation, and live maintenance.

TEACHING & TECHNICAL WORKSHOPS

- **IBM Cloud Workshops (2017–2018)** — designed and delivered hands-on training on IBM Cloud services, deployment workflows, and API integration for developer and enterprise audiences.
- **IBM Chatbot Development Workshops (2017–2018)** — led practical sessions on conversational-AI service design, implementation, and deployment.

AWARDS & CERTIFICATIONS

- **First Place, IBM Chatbot Hackathon** — 14 June 2017. Winning team award: DJI drone.
- IBM Certified Application Developer — Cloud Platform V2.
- IBM Certified BPM Standard V8.5.7 Developer.

LANGUAGES

- **Turkish** — native.
- **English** — TOEFL iBT 5.5 / 6.0 (2026 CEFR-aligned scale).