

## Education

- **University of Sheffield** Sept 2016 - June 2020  
*BEng Software Engineering with a Year In Industry* *Sheffield, UK*
  - First year modules include “Algorithms and Data Structures”, “Java Programming”, “Machines and Intelligence” and “Devices and Networks”
  - Second year modules include “Data Driven Computing”, “Advanced Programming Techniques”, “Bio Inspired Programming and Robotics” and “Automata, Logic and Computation”

## Work Experience

- **Software Engineer** October 2018 - Present  
*Viagogo* *Limerick, IE*
  - Worked in the Customer Service and Fulfilment Engineering team
- **Software Engineer** July 2018 - October 2018  
*Viagogo* *London, UK*
  - Did a work placement in London as part of my university course
  - Used the C# / SQL Server stack
  - Worked on payment APIs and internal microservices
  - Wrote parsers and data import tools for Payment Service Provider file formats
  - Worked on integration with various ticket provider APIs
- **Web Designer** August 2017 - June 2018  
*Websell Masters Ltd.* *Sheffield, UK*
  - Worked with a team of 5 people on numerous company and customer websites
  - Used PHP/MySQL on the backend and HTML5/CSS/JS on the frontend
  - Worked closely with customers to design websites for their companies, according to their specifications
  - Did support on customer websites, such as maintenance and amendments

## Activities and Experience

- **Global Engineering Challenge (GEC)** January 2017  
*The University of Sheffield*
  - Worked with a team of 6 engineering students from various disciplines on a project proposal
  - The project aim was to design a real-time network to monitor the air quality and pollution in Cameroon
  - As a result of this project we designed a low-cost system that could be geographically distributed, wrote a detailed report on how the project can be built, and risk assessed it
- **Engineering: You're Hired** January 2018  
*The University of Sheffield*
  - Worked with 5 other engineers from various disciplines on a project proposal
  - The project aim was to build a water desalination plant and a nuclear reactor for an island in Spain
  - As a result of this project we designed a sustainable and low-risk system for the island that produces enough drinking water for the population and breaks even for the investors in 13 years
- **Personal Software Blog** 2016-2018  
*gkbrk.com*
  - Wrote articles on various technical topics, including reverse engineering and software development
  - Some articles were translated to other languages and republished on other websites
  - Featured on Hacker News and Reddit

## Technical Skills

- **Programming Languages:** Java, Python, C#, Rust, Ruby, Javascript, C, C++, PHP, Haskell
- **Data Gathering and Storage:** Web scraping with Regular Expressions and HTML parsers, SQLite and PostgreSQL databases
- **Operating Systems:** Experienced in running Linux on a web server
- **Reverse Engineering:** Some experience in reverse engineering the network protocols of games, mobile applications and malware in Wireshark
- **Tools:** Git, Vim, Emacs, Bash, LaTeX, Visual Studio, SQL Server Management Studio

## Additional Skills

- **Teamwork Skills:** I am a good team player and I collaborate well with others. In my university course, I have learned about agile development and participated in activities involving SCRUM and Kanban.
- **Language Skills:** Fluent in English (IELTS 8.0), Turkish (Native Language), German (TELC B2 Certificate)

## Honours and Achievements

- **Honour Roll / Faculty of Excellence** 2016  
*The University of Sheffield*
  - Awarded to me because of exceptional academic performance and grades during my study

## Research Interests

I am interested in conducting research about evolutionary algorithms, genetic programming and machine learning using genetic algorithms. Another research interest of mine is distributed network protocols.

## Open Source Projects

- **Slowloris** A security testing tool written in Python in order to check if a server is vulnerable to *the Slowloris attack*
- **Chat Clients** Client libraries for various messaging protocols including IRC and hackchat
- **SMTP Server** An email server written in Rust to become familiar with the SMTP protocol. Successfully interfaces with gmail and other email services.

## References

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