David Simon **Tetruashvili**

POSTGRADUATE COMPUTER SCIENCE STUDENT

Zurich, Switzerland. • *Berlin, Germany.*

☎ +41 (0) 76-723-3936 | ✉ david.tetruashvili@proton.me | ⊡ davzzar

Education

Swiss Federal Institute of Technology (ETH Zurich)
Zurich, Switzerland

MASTER OF SCIENCE IN COMPUTER SCIENCE
Sept. 2020 — Present

- Relevant courses:
  Game Programming Lab (C#/.NET) • Advanced Machine Learning • Computer Vision • 3D Vision
  Physically-based Simulation in Computer Graphics (C++) • Machine Perception

King's College London — University of London
London, UK

BACHELOR OF SCIENCE IN COMPUTER SCIENCE (WITH ARTIFICIAL INTELLIGENCE) (HONS.)
Sep. 2017 — Aug. 2020

- **First-class degree. (GPA: 86%)**
- Relevant modules include:
  Information Security • Internet Systems *[**96% (Top mark in class)**]* • Database Systems (MySQL) *[**90%**]*
  Software Engineering Group Project *[Major Project: **91%**, Written Examination: **92% (Top mark in class)**]*
  Programming Practice and Applications (Java) *[**96%**]*, Practical Experiences of Programming (C++/Scala) *[**91%**]*,
  1_eIntroduction to Software Engineering *[**90%**]*, Operating Systems and Concurrency *[**73%**]*,

Berlin International School — Private Kant-Schule
Berlin, Germany

INTERNATIONAL BACCALAUREATE DIPLOMA
Sep. 2015 — May 2017

- **Overall 42/45 points**, including **6/7 points** in Higher Level Mathematics.

INTERNATIONAL-GCSE
Sep. 2013 — May 2015

- 10 IGCSEs with eight being A* or A, including A*s in Mathematics, Physics, and ICT.

Experience

Mobile App Developer & Database Engineer
London, UK

GUY'S AND ST. THOMAS' HOSPITAL NHS TRUST
Feb. — Mar. 2019

- In a team of eight, I developed a Doctor-Patient communication and medical test compliance cross-platform mobile app called **"Prep."**
- I designed and implemented the app's UI with focus on accessibility, utilizing Google's Flutter framework. • I designed and implemented the back-end system with emphasis on privacy, data leak prevention, and scalability using Google's NoSQL Firebase • I managed and maintained the project's Git history
- I created and narrated a screencast presenting the final application.
- Our solution has been shortlisted for funding.

Projects

Seth's PyraMall — A Competitive Couch Platformer
Zurich, Switzerland

GAME DEVELOPER/DESIGNER, GIT MASTER, ASSET CREATION
Feb. 2022 – May. 2022

- As a part of the Game Technology Center's Game Programming Lab, in a team of six, I developed a 2D retro-style platformer game using C#, .NET, and the Monogame framework.
- Led the team: set priorities, defined and assigned individual tasks, mainated theproject's issue log, as well as the projects Git etiquette and history.
- As a developer, I developed the character controller, contributed to the sound-effect system and the menu GUI system.
- I learned how to apply C# and .NET during the project. How to apply OOP design-patterns in the language, as well as how to keep a clean and well-documented codebase.
- I presented the final game to an audience of c. 200; won the **Jury Award** from the triple-A Studio Gobo for the game.

Tool for Analyzing Projects and Resouce Allocation Trends
Zurich, Switzerland

DEVELOPER
Sep. 2021 – Jan. 2022

- As a part of the Hack4Good program, in a team of four, I developed an NLP analysis package for Helvetas to help the company better understand the distribution of their decentrelized internaltional projects.
- I developed and tested NLP models for the analysis, implemented the package's business logic and partly designed its web-based UI. I used Docker to share the prototype with the company.
- The package allows the user to analyze a dataset of projects, classify them into areas of development, and identify trends appearing in their descriptions and outcomes to better allocate resources.

Solved-AF: Argumentation Framework Solver and "SAF-link" API
London, UK

DESIGNER AND PROGRAMMER
Oct. 2019 — Aug. 2020

- I designed and developed an Argumentation Framework solver for non-monotonic reasoning as part of my Bachelor's Thesis with the goal of producing a solver for educational and exploratory purposes.
- To aid in the exploratory role, I developed a REST API prototype which enables web clients to use the rich the plethora of existing Argumentation Framework solvers bypassing the knowledge barrier to use.
- The thesis achieved a first-class mark, in part due to the implementation.

Skills

Languages	English, German, Russian.
Programming	Python, C/C++, C#, Go, Java.
Machine Learning	PyTorch, NumPy, Pandas, SciPy, Matplotlib, etc.
Systems	Linux, Docker, SSH/Remote Access, Zsh/Bash scripting & automation, Git & GitHub/GitLab.
Tools	(Microsoft) Office Suite, IaaS (Digital Ocean, Vast.ai), LaTeX.

Awards

2022	**Studio Gobo's Jury Award**, Game Programming Labaratory, ETH Zurich	*Zurich, Switzerland*
2020	**Nomination**, Informatics Outstanding Teaching Award, KCL Informatics Department	*London, UK*

Extracurricular Activity & Volunteering

ETH Zurich Student Project House
Zurich, Switzerland

MAKERSPACE MANAGER
April. 2022 — Present

- I volunteere as a makerspace manager at the Student Project House at ETH Zurch.
- My responsibilities include giving introductory lectures/workshop on the in-house machinery and equipment, giving general introductions to the makerspace, supervising the makerspace and manning the counter during open-hours.

KCL Informatics and Engineering Teaching Assistant Liaison Committee
London, UK

MEMBER
Jan. — Aug. 2020

- I acted as a contact point to the TA community in case of concerns with module leaders and TA-related procedures.

KCL Informatics and Engineering Student-Staff Liaison Committee

TEMPORARY MEMBER/ACTIVE PARTICIPANT
Dec. 2019

- I volunteered time to raise and discuss possible solutions to student concerns about the KCL 'Artificial Intelligence Planning' module with both the administration of the faculty and the module leaders Dr Stefan Edelkamp & Dr Daniele Magazzeni as a member of the student body.

Modern Language Center at King's College London

GERMAN AND RUSSIAN LANGUAGE TUTOR
Apr. — Aug. 2019

- I volunteered time to run speaking practice sessions with students at the university and persons of the public.
- I evaluated and gave feedback on the students' use of the language and lexicon ultimately to help them express themselves in the language.
- I helped students build confidence in speaking the language in a safe environment.

Beginner's Programming and Game Development Workshop
Berlin, Germany

WORKSHOP LEADER AND ORGANIZER
May. — Jul. 2017

- I founded and launched an after-school beginner's programming workshop after learning that the school did not offer adequate education in the topic 'due to low demand.'
- I thought the basics of programming to a class of c. 30 students of mixed ages using Python 3 and the 2D game engine Game Maker Studio.
- This effort was acknowledged by the school and the administration, and was noted in that year's yearbook.