ALEKSANDR MATTAL

qute.bits@gmail.com

LIFE / EDUCATION

This resume was generated using 42 lines of very readable python from: https://github.com/qutebits/resume_42/compiled on: November 13, 2014.

2004–2012 Christian-Albrechts-University - Kiel, Germany

Diplom in Computer Science (with minor in Mathematics).

Final grade: 1.95 (best possible: 1.0)

1996–2004 High school Tallinna Tõnismäe Reaalkool (with major in Mathematics) - Tallinn, Estonia

Final grade: 4.89 (best possible: 5.0)

1997–2001 Art school Rakenduskunsti Erakool - Tallinn, Estonia

Final grade: 8.17 (best possible: 10.0)

1987 born in Estonia

WORK EXPERIENCE

H19 Produktion - Kiel, Germany

2007-Present Lead Designer / Web Developer (JavaScript, Python, PHP)

· Programmed an enterprise grade communication/ordering platform (full stack),

· Developed (both frontend and backend) websites/services based on Wordpress/Contao,

· Designed CI's, posters, flyers, catalogues, business cards etc.

WortBildTon, New Communication - Kiel, Germany

2012–2014 Freelancer as a Designer / Jr. Project Manager / Web Developer (JavaScript)

· Helped with the management of a major project,

· Developed an awesome frontend for an analytics tool (2000+ users as of Oct.2014).

Raytrix - Kiel, Germany

2010 Internship (Research)

· Lazer path optimization using pythagorean-hodograph curves in \mathbb{R}^4 .

Christian-Albrechts-University - Kiel, Germany

2009–2010 Student Tutor

· Tutored a lecture in cryptography, corrected students homework,

 \cdot Voluntarily gave a sneak peak into Zero-Knowledge Proofs and PCP Proofs to the students.

Christian-Albrechts-University - Kiel, Germany

2006–2009 **Programmer (C++, Java)**

 \cdot Proposed an algorithm for real-time matching of filmed objects with their 3D-models,

 \cdot Implemented several real-time pattern recognition and triangulation algorithms,

· Made some of the code run 10x faster so to be used in real-time video analysis,

 \cdot Implemented several sheduling algorithms and a GUI for their usage (J2EE + Swing).

RESEARCH EXPERIENCE

Field Game Theory

Title Extensive Form⁺ : Describing Games Linear Nature (Diploma Thesis, 52 pages) **Supervisor** Prof. Dr. Thomas Wilke, chair for theoretical informatics, University of Kiel.

Description Studied games with betting structures present in Poker. Proposed a new way to describe

such structures, a strategy space and a set of equilibria on it. Proved the existence of such equilibria for finite Extensive Form⁺ games satisfying perfect recall. Submitted in 2011.

Final grade: 1.0 (best possible: 1.0)

PORTFOLIO

GitHub Portfolio - https://github.com/qutebits/

Graphical Portfolio - http://www.coroflot.com/qutepixels/

Personal Blog - http://scriptogr.am/qutebits/

PROJECTS

My Taste of Ideas (Blog Post) - http://scriptogr.am/qutebits/post/q04-qute-hack-ideas/

- · A post from my blog where I enlist 21 personal ideas that appeal to my taste,
- · The blog itself is hosted on Scriptogr.am. Uses **Markdown** for posts, **MathJax** for TEX snippets, **Scriptogr.am** for static HTML generation, **Dropbox** for posts sync and **GitHub** as storage for images.

VKontakte Playlist Downloader (GitHub Project) - https://github.com/qutebits/vkpd/

- · Chrome Extension for batch download of audio tracks from social network VKontakte,
- · The blog post about it is here http://scriptogr.am/qutebits/post/q01-vkontakte-playlist-downloader

YAML to PDF Resume Generator (GitHub Project) - https://github.com/qutebits/resume_42/

- · Generate a small and nice PDF Resume out of YAML data,
- · Main script is written in **Python**, translates **YAML** data into T_FX using **Jinja** templating engine.
- · This whole Resume is generated with it :)

Diploma Thesis (PDF, in English) - https://github.com/qutebits/final_thesis/

- \cdot Diploma Thesis I've submitted in 2011 for completion of the Computer Science studies,
- · It all started as an affection to Poker and WSOP glamour which soon enough led me to questions about the mathematical nature of the game. Enjoy.

SKILLS

Languages of choice JavaScript, PHP, Python

Languages C++, Java, Haskell, Assembler

Base Stack CMS: Wordpress/Contao, SQL: MySQL/PostgreSQL, VCS: Git

Design Adobe Creative Suite

ACHIEVEMENTS

2004 Participant of International Mathematical Olympiad (IMO04 - Athens, Greece) as a repre-

sentative of Estonian National Team.

2001 2. place, PC game character design competition (Etherlords, Nival Interactive, 2001).

HUMAN LANGUAGES

English Fluently speaking and writing (IELTS 7.5/9.0, GMAT 730/800)

German Fluently speaking and writing (TestDaF 17/20) **Estonian** Speaking and writing (Kesktase 89/100)

Russian Native language