# **ALEKSANDR MATTAL**

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### LIFE / EDUCATION

This resume was generated using 42 lines of very readable python from: https://github.com/qutebits/resume\_42/compiled on: November 02, 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)

Christian-Albrechts-University - Kiel, Germany

2010 Web Developer (PHP)

· Programmed TYPO3 Extensions for the faculty website. Nothing fancy.

Christian-Albrechts-University - Kiel, Germany

2009–2010 Student Tutor

· Tutored a lecture in cryptography, corrected students homework.

· 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)** 

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

· 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<sup>+</sup> : 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<sub>F</sub>X 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, Brainfuck

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