DANIEL TISCHNER

Software Engineer, 26

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ZabuzaW



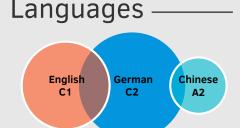
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10,685 Rep. • 5 • 25 • 38

Skills -Overview **Algorithm** Web Dev Engineering Software **Theoretical** Agile **Engineering** Scrum **Mathematical** Game **Analysis** Dev

Programming

 \longrightarrow 3 000 000 LOC0 LOC -Java PHP • SQL • HTML • JS • CSS C • C++ • C# • Python



Education

2016 - Present M. Sc., Computer Science

University of Freiburg, Germany

2012 - 2016

B. Sc., Computer Science (GPA: 1.9)

University of Freiburg, Germany

Experience

Oct 2016 -Present

Tutor

University of Freiburg, Germany

- Assisting students understanding the contents of courses, organization of weekly meetings
- · Courses:
 - Programming in C++
 - Information Retrieval
 - Algorithms and data structures
 - System Design Project

Nov 2008 -Present

Administrator & Content Creator

FreewarWiki, Online

- Development of automated bots and scripts that execute recurring tasks, database management, creation of scripted templates to assist inexperienced users in content creation
- Extensive documentation of game elements and content
- Inspection, correction and improvement of contributions

Nov 2014 -Dec 2015

Board & Webadmin

Gruppe W, Online

- · Web development, performance improvement, development of automated web-integrated management software to ease workflow of all members
- · Human resource management, project management, planning and giving conferences, mediator
- · Development of modifications for ArmA 3, creation of 2D artwork and video editing

Mar 2007 -Jul 2012

Lead Programmer & Artist

Tales of Freewar Team, Germany

- Programming a RPG using the game framework RM2k3, responsible for game logic, implementing story, levels, conversations and battle logic
- Creation of 2D Art and sound editing, design and draft of maps

Awards

Jan 2017

SV-COMP 2017: Gold in Overall

ETAPS/SV-COMP

• The competition compares state-of-the-art tools for software verification with respect to effectiveness and efficiency. The competition consists of two phases: a training phase and an evaluation phase.

Oct 2016

RERS Challenge 2016: Gold in Overall

 The RERS Challenge provides a wealth of problems of increasing complexity, the more involved of which will probably be beyond any individual state-of-the-art method or tool. Characteristic for RERS is its wide scope, which addresses not only source code analyzers. but also (model-based) testers and (test-based) modelers, and in particular Free stylers.

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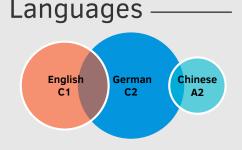


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Overview Web Dev Algorithm Engineering Theoretical Software Engineering Scrum Game Mathematical Analysis

Programming

 $0 \ LOC \longrightarrow 3 \ 000 \ 000 \ LOC$ Java $PHP \bullet SQL \bullet HTML \bullet JS \bullet CSS$ $C \bullet C++\bullet C\# \bullet Python$



Publications & Preprints

Sep 2018 Multi-Modal Route Planning in Road and

Transit Networks

Preprint arXiv

Mar 2017 Minimization of Visibly Pushdown Automata

Using Partial Max-SAT

TACAS 2017/Springer

Mar 2016 Minimization of Büchi Automata using Fair Simulation Preprint arXiv

Projects

Apr 2018 - Cobweb

Present

journey-planner, multi-modal-search, traffic-networks, shortest-paths

- Development of a backend for a multi-modal journey-planner
- Research, implementation, optimization and benchmarking of shortest path algorithms
- · Processing OSM, GTFS and real-time data on huge traffic-networks

Dez 2015 - ULTIMATE

Oct 2017

program-analysis, model-checking, reachability, termination

Development, implementation, analysis and benchmarking of algorithms to generate random finite word, infinite word, nested word and tree automata (FA, NWA, TA) and also algorithms to minimize them

Apr 2016 -Oct 2017 Sparkle

api, selenium, mmorpg

 Creation of a robust Selenium driven API for a browser embedded MMORPG which uses web-crawling mechanisms

Jun 2016 -

Mem-Eater-Bug

Apr 2017

jna, memory-manipulation, code-injection, windows-api

- · Familiarization with security technologies and reverse engineering
- Providing an API which is capable of hooking onto other processes in order to provide memory manipulation methods and the possibility to inject foreign code

Apr 2014 - Antigen

Feb 2015

game, real-time-strategy, game-design, scrum

- In a team of 5 develop a strategy game from scratch using Scrum as software development managing framework
- Draft and design of an idea for a real time strategy game, creation of a detailed game design document
- Implementation of the game, primarily its logic and fast collision detection solutions