Alexander Weichart

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 homepage | linkedin | github

SKILLS

Main Languages	TypeScript	Rust	Python
Main Technologies	React.js, Node.js, Vite	PostgreSQL, Neo4j, Redis	OpenAI, LangChain	Linux

EDUCATION

Bachelor of Arts - Media Informatics (Information Science, Philosophy)   Sep 2019 - Sep 2023

University of Regensburg   *Regensburg, DE*

- Focus: Full Stack Development, Agile Project Management, Natural Language Processing, and Ethics.
- Gained comprehensive knowledge of full stack development, encompassing database management and user interface design.
- Acquired proficiency in agile methodologies and user-centered software development through multiple group projects.

EXPERIENCE

University of Regensburg   Sep 2020 - Sep 2023

Student Research Assistant - JavaScript, Java, C, Neo4J, Figma   *Regensburg, DE*

- Developed various applications for prototypes, studies and production deployments.
- Built an Android application that allows creating screenshots of a computer screen by photographing it with a smartphone.
- Developed a driver and backend infrastructure for enabling network-based printing onto E-Ink displays.
- Helped in developing a desktop application for tracking analog personnel files within the University of Regensburg's administration.
- Contributed to the architecture of a knowledge graph for course content, as well as web applications leveraging it to enhance curriculum planning and student learning support.

SIDE-PROJECTS

TinyCompTS [1]   Dec 2021 - Mar 2022

Compiler Developer - TypeScript, npm, Deno   *Regensburg, DE*

- Developed an small compiler, capable of lexing, parsing, and compiling text input to JavaScript code based on user-defined attribute grammars.
- Utilized TypeScript for the codebase, and made the project accessible as an open source npm and deno package.

Flow Graph [2]   Mar 2022 - May 2022

Frontend Developer - TypeScript, D3.js, Tailwind CSS   *Regensburg, DE*

- Created an web application to depict the relationships between concepts through an interactive graph.
- Used TypeScript, D3.js for the graph visualization, Tailwind CSS for styling, and TinyCompTS for parsing input.

Obsidian Note Linker [3]   May 2022 - Sep 2022

Frontend Developer - TypeScript, React.js, Rust, WebAssembly   *Regensburg, DE*

- Developed an open-source extension for Obsidian, facilitating automatic scanning and linking of notes that reference one another.
- Divided the codebase into distinct UI and business logic components, utilizing React and TypeScript for UI development, while employing Rust for business logic implementation. The Rust codebase is compiled to WebAssembly and executed in a dedicated web worker thread.

EXTRACURRICULAR ACTIVITIES

- Actively involved in Ratisbona Coding E.V.[4], contributing to the organization and coordination of numerous coding-related events such as the annual "Hackaburg" Hackathon held in Regensburg, Germany.
- Personal Interests: Building side projects, learning about Japanese language and culture, practicing strength and cardio training.

PUBLICATIONS

- Andreas S., Thomas F., **Alexander W.**, Alexander H., and Raphael W., "ScreenshotMatcher: Taking Smartphone Photos to Capture Screenshots." *MuC '21: Proceedings of Mensch und Computer 2021*, Ingolstadt Germany.

References

[1] A. Weichart, "TinyCompTS," https://github.com/AlexW00/TinyCompTS, Mar. 2023.

[2] ——, "FlowGraph - alpha," https://github.com/AlexW00/Flow_Graph, Mar. 2023.

[3] ——, "AlexW00/obsidian-note-linker," https://github.com/AlexW00/obsidian-note-linker, Mar. 2023.

[4] "Ratisbona Coding e.V." https://ratisbona-coding.org/.