RAMANAMURTHY KATAKAM

C++ Developer | Web Developer | Java Developer

@ katakamramanamurthy@gmail.com ✉ Am Herrenrödchen 1b, Wiemar,Germany 📍 Wiemar, Thüringen

in ramanamurthy-katakam-9b44ba18b/ ○ DattaKatakam?tab=repositories/

EXPERIENCE

Research Assistant C++ Developer

Bauhaus University

📅 Sept 2022 – Ongoing   📍 Wiemar, Thüringen

- **Main Competencies:** C++ programming, signal processing, QT Creator, Open CV, algorithm design, LaTeX, C#.
- **Responsibilities:** Code development, documentation, signal generation, support vector machines (SVMs), tests, collaboration, continuous learning, K-Means clustering, data loggers.

Systems Engineer

Infosys

📅 Jun 2021 – Nov 2023

- **Main Competencies:** Java, Linux, Networking, Ansible, Bash scripting.

Web Developer

📅 Jun 2023 – Nov 2023   📍 Wiemar, Thüringen

- **Main Competencies:** Web design, HTML, CSS, JavaScript, WordPress, Elementor.
- **Responsibilities:** Website creation & hosting, Redesign, Content Management, Collaboration with clients, and efficient project implementation.

EDUCATION

MSc, Digital Engineering

Bauhaus-University

📅 Apr 2021 – till date   📍 Wiemar, Thüringen

- **Main Competencies:** Java, SQL, HTML, object-oriented programming, CSS, JavaScript, algorithms and data structures, MATLAB, Octave, Fusion360, ANSYS, ANYLOGIC.
- **Educational Achievements:** Completion of study subjects and the master's thesis, project development, simulation, modeling, communication skills, problem-solving, collaboration, and innovative contributions.

B.Tech, Mechanical Engineering

JNTUK - UCEV Vizianagaram

📅 2016 – 2020   📍 Vizianagaram, India

- **Main Competencies:** CAD Software (Fusion 360, CATIA, Solidworks), Thermodynamics, Cooling, Air Conditioning, Fluid Dynamics, Mechanical Design.
- **Educational Achievements:** Completion of study subjects and the bachelor's thesis (E-MOPED design, simulation, and built prototype), project design, machine operation, automobile engineering, heat transfer, thermodynamics, and their understanding, along with basic software programming languages.

MOST PROUD OF

🏆 **Independent and Self Reliant**
Capable of managing any situation autonomously with utmost dedication and effort

📈 **Professional Development**
Transitioning to my current role as a Software Developer from a mechanical engineer Under graduate this involved overcoming numerous challenges and acquiring extensive knowledge along the way.

STRENGTHS

Programming Languages C++ Java C# Python

Web Development HTML CSS Java Script PHP (Basics) WordPress Elemantor

OOPS GIT SQL DevOps (Basics) Linux Docker

IDEs QT Creator Visual Studio VS Code Eclipse Vim Editor Octave

Mechnical Softwares Autodesk Auto CAD Autodesk Revit Solidworks CATIA Fusion 360 ANSYS CREO MATLAB ANYLOGIC

Problem solving Persuasive Team player

LANGUAGES

English ●●●●●
German ●●●○○

PROJECTS

- ⚙️ **K-Means Clustering (Software Development)**

  During my career as a C++ developer and research assistant, I had the opportunity to develop a Kmeanslib library file encapsulating functionality for the K-Means Clustering algorithm in C++. It provides methods and attributes for a class to initialize, adjust, and predict clusters based on multidimensional input data. All data can be found on this GitHub link.

- 📶 **Signal Processing Libraries (Software Development)**

  During my role as a C++ developer and research assistant, I implemented a library generating waves of various types such as sinusoidal, cosinusoidal, square, Fourier, sawtooth, random noise signal, and Continuous Wavelet Transformation (CWT) Discrete Fourier Transformation (DFT) on waves using C++. All data can be found on this GitHub link.

- 🌐 **Menka und Cookie Website (Web Development)**

  In this project, I used web development tools (HTML, CSS, JS) to create the website https://menkaundcookie.de, based on the book "Menka und Cookie" by a young author team. This was a freelance project for third parties. Throughout this project, I developed and hosted the website, resulting in the generation of Google search results since its publication.

- 🔍 **Personalized Argument Search (Web Development)**

  During my project, I worked with web development tools (HTML, CSS, JS) to design and enhance the args.me website. I implemented search suggestions and query history using the client's local browser storage and a JS file with some word suggestions for automatic search completion.

- 🔤 **Translation of Limboole to SMT (Java, Limboole, SMT)**

  In this project, we were tasked with translating formulas in Limboole format to the SMT-LIB-2 format and checking their performance in formula conversion. I used Java for format translation and performance testing.

- ⚙️ **Corona Self-Assessment Application (SQL, Java)**

  I developed software that assists users in self-assessing coronavirus symptoms and provides suggestions based on their symptoms. I used Java Swing in Eclipse for application design and SQL commands for data storage.