Ayush Mani Nepal

Profile

Software and Tech enthusiast with a passion for problem-solving is seeking a new opportunity

Contact

- ✉ aaus_nep@hotmail.com
- 🌐 ayushnepal.github.io
- ⌂ Wolfsburg Region, Germany

Personal Info

Birth year: 1990
Nationality: Nepali
Languages:
- ◇ German (Business fluent)
- ◇ English (Business fluent)
- ◇ Hindi (Fluent)
- ◇ Nepali (Mother-tongue)

Main Competencies

- ◇ Team-spirit, Communication
- ◇ Software (Design, Architecture, Development, Operation)
- ◇ SW-Documentation (Concept, Architecture, Detailed Design)
- ◇ Agile, SOLID, Clean-Code
- ◇ C++, Java, C#, Python
- ◇ SW-Model, MBSE, MDD
- ◇ UML, XText, Xtend, Code-gen

Technical Know-how

- ◇ Linux, Windows, Android
- ◇ Git, Git-lab, SVN, CI/CD
- ◇ MVC, MVVC, Observer, MPI, etc.
- ◇ Testing, Test Automation, TDD
- ◇ Deep Learning, PyTorch, CUDA
- ◇ Java-script, HTML, CSS
- ◇ Database, SQL, Container
- ◇ Azure, JIRA, Confluence

Hobbies

Music, Traveling, Hiking

Professional Experiences

Senior Software Engineer Full-Stack
IAV GmbH

June 2023 — Now
Gifhorn, Germany

- — *Middleware Software Development for a Radio-Tuner in C++*
- — *Responsible for the development of station linking and listing features*

R&D Scientist
German Aerospace Center (DLR)

June 2019 — May 2023
Braunschweig, Germany

- — *R&D of AI toolsets for their applications in space systems*
- — *R&D of MBSE toolsets to facilitate model-driven development of the flight software for various space missions*
- — *Contributed to Tasking Modeling Language (TML), an open-source MBSE tool for model-based software development*
- — *Supervised students in their thesis projects and internships*

Student Job
German Aerospace Center (DLR)

Mai 2017 — April 2019
Braunschweig, Germany

- — *Model-based system engineering for space systems*

Electrical and IT Engineer
Airbus Defence and Space (extern)

April 2015 — Sep 2016
Immenstaad, Germany

- — *Designed and developed test-automation framework to test the Off-Board Map Preparation System for fighter planes*
- — *Automated thousands of software and system test-cases using the self-developed framework*

Engineering Consultant
ALTEN GmbH

Nov 2014 — March 2015
Munich, Germany

- — *Front-end development in WPF/C# for the Building-automation*

Internship
Airbus Defence and Space

Aug 2014 — Oct 2014
Immenstaad, Germany

- — *Analyzed the feasibility of the test-automation in the given context*

Student Job
Airbus Defence and Space

Oct 2012 — Dec 2013
Ulm, Germany

- — *Application development in C#/.Net and C++*

Courses and Certifications

- ◇ iSAQB Certified Professional for Software Architecture
- ◇ Clean-Code Developer Associate from Codelution
- ◇ Systems Engineering from UNITY Consulting & Innovation
- ◇ Project Management Compact

Studies

M.Sc. Computational Sciences in Engineering (CSE)
TU Braunschweig

2017 — 2019
Braunschweig, Germany

B.E. Electrical Engineering and Info Tech
FH Ravensburg-Weingarten

2010 — 2014
Weingarten, Germany

Publications

- — The BECCAL Experiment Design and Control Software
- — Tasking Modeling Language: A Toolset for Model-based Engineering of Data-driven Software Systems
- — Modeling and Simulation of a Spacecraft Payload Hardware Using Machine Learning Techniques
- — PaTaS: Quality Assurance for Model-driven Software Development