



Zenin Easa Panthakkalakath

Email: zeninpeasa@gmail.com LinkedIn: [in/zenineasa](https://www.linkedin.com/in/zenineasa) GitHub: [@zenineasa](https://github.com/zenineasa) Location: [Lugano](#)

Career Objective

Highly skilled software developer with expertise in JavaScript, C++ and Python. Experienced in deep learning and reinforcement learning. Proven track record in developing cutting-edge software tools and applications. Strong academic background in computational science and mechanical engineering. Adept at collaborating with cross-functional teams and delivering exceptional results. Eager to contribute my talents to a dynamic software development role.

Work Experience

◦ Student Assistant

Università della Svizzera italiana [Feb 2022 – Present]

- Worked under Prof. Dr. Olaf Schenk.
- Assisted students at Università della Svizzera italiana, Friedrich-Alexander-Universität and ETH Zürich in the *High-Performance Computing* courses.
- Assisted in updating the course content for *Numerical Computing* course, facilitating a transition from MATLAB to Julia.

◦ Senior Associate Engineer

MathWorks India Pvt. Ltd. [Jun 2018 – Sep 2021]

- Developed tools for *Discrete Event Simulation* and *Agent-Based Modeling* using C++ and JavaScript, integrating them with existing products in MATLAB/Simulink.
- Implemented the Xception Network support package for MATLAB.

◦ Summer Intern

Vuelogix Technologies [Apr 2017 – Jul 2017]

- Implemented a system using deep neural networks to detect people wearing helmets inside ATMs using transfer learning on YOLOv2.
- Developed a React Native App to assist field agents in setting up security devices in ATMs.

◦ Summer Intern

Forthcode Technologies [Apr 2016 – Jun 2016]

- Implemented an adaptive search program based on phonetic similarity and user choice history for queries.

Patents filed

- Cryogenic Micromachining Apparatus and Method Thereof (IN202031020431) [May 2020]
- System and method for detecting the change in occupancy status of slots over a platform (IN201731036379) [Dec 2017]

Education

◦ Master of Science in Computational Science

Università della Svizzera italiana [2021 – 2023]

◦ Bachelor of Technology in Mechanical Engineering

Indian Institute of Technology Patna [2014 – 2018]

Publications

- **Application of deep and reinforcement learning to boundary control problems [2023]** Under review tiny.cc/z7l9vz
- **A deep learning framework for COVID outbreak prediction [2020]** arxiv.org/abs/2010.00382

Projects

- **HexHoot** - Opensource P2P communication with ZKP authentication [Aug 2022] hexhoot.com
- **Tool-Workpiece Contact Switch for Micromilling Machine** [May 2018] tiny.cc/08l9vz
- **Smart containers 2.0.** [Oct 2017] youtu.be/g5njrmDuBlo

Honours and Awards

- Runners up in MathWorks BGL Virtual Hackday [Dec 2020]
- Runners up in MathWorks BGL Hackday [Nov 2018]
- First place in Capture The Flag, Anwesha '17 [Jan 2017]
- Finalist in Amazon Code Wizard Challenge [Apr 2017]
- First place in Capture The Flag, Anwesha '16 [Jan 2016]

Volunteering

- Student Volunteer, PASC23 [Jun 2023 – Jun 2023]
- Coordinator, Web and App Development, Anwesha'17 [Mar 2016 – Jan 2017]
- Sub-coordinator, Creatives and Design, Anwesha'16 [Mar 2015 – Jan 2016]
- Member, National Service Scheme [Jul 2014 - May 2018]