A TUM VENTURE LAB COURSE

TRAINING CAMP

MACHINE LEARNING

Why should you join?
If you are curious to understand how Machine Learning can be used in your discipline to improve processes or accelerate research, then this compact two-day course is right for you. It is open to Master and PhD students from all MINT disciplines.

Course Description
Our Machine Learning training camp provides participants the mathematical foundation and basic technologies of machine learning, beginning with common tools for dimensionality reduction, to current deep learning approaches and reinforcement learning.

The training camp showcases benchmark applications of machine learning and helps you to develop a solid understanding of the tools and how they are used in real applications.

If you always had the desire to grasp machine learning concepts, our compact format combining research and practical industry experience will help you get an insight into the world of machine learning.

Course Structure
- **Module I**: Overview of ML concepts and methods. Participants will be able to answer the questions: What is ML? How does it work? How do I benefit from ML? Participants will also be able to develop and apply simple ML models.
- **Module II**: Participants become familiar with more complex ML models, such as deep learning and reinforcement learning. Upon completion of Module 2, participants will be able to comprehend advanced ML concepts.

Join the SW/AI Venture Lab Community
The SW/AI Venture Lab aims to empower students, researchers, and entrepreneurs at TUM to apply software and artificial intelligence. Join this course to learn more about the community and future initiatives we have planned.

Learn about our offerings on [https://www.tum.de/venturelabs](https://www.tum.de/venturelabs)

SW/ AI Venture Lab
The TUM Venture Labs, an initiative by TUM and UnternehmerTUM, are new entrepreneurial innovation hubs supporting entrepreneurial talent in tech-based business translation from research to business creation.

The SW/ AI Venture Lab aims to both boost Software/ Artificial Intelligence startups on their growth journey as well as support other disciplines to accelerate their innovation through Software or Artificial Intelligence. To achieve this, it offers educational courses, venturing programs, networking events, and access to resources and funding.

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Facts and Figures
- **Who**: Open for 20 Master/ PhD students from MINT backgrounds (basic understanding in linear algebra, probability theory useful)
- **When**:
  - 17th & 18th Dec 2020, 10:00 – 15:00
  - 21st & 22nd Jan 2021, 10:00 – 15:00
- **Where**: online via Zoom

Registration
- **Register until Friday 11th Dec 23:59**
- Register under the following link: [https://in.tum.de/i04/sw-ai-venture-lab](https://in.tum.de/i04/sw-ai-venture-lab)

Contact
- **Course Related**: kross@fortiss.org
- **Venture Lab Related**: venturelabs@tum.de