

# Uranik Berisha

Ph.D. Researcher in Efficient Deep Learning

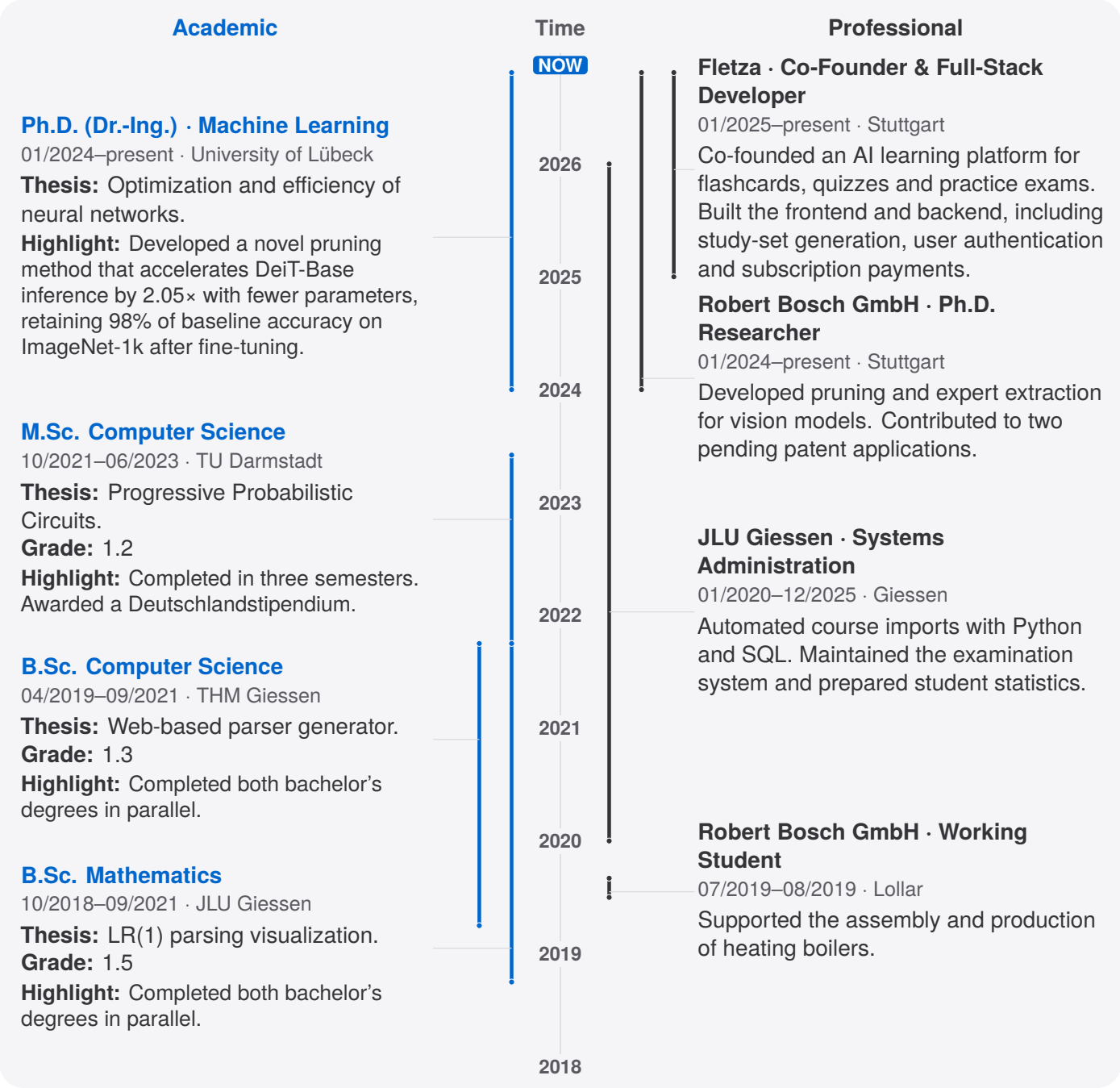
Stuttgart, Germany

[LinkedIn](#) | [Google Scholar](#) | [Website](#)



Ph.D. researcher focused on efficient deep learning and computer vision, with first-author papers at top-tier CV conferences **CVPR 2025** and **ICCV 2025 (Oral, top 0.57% of submissions)**. **Co-founder and full-stack developer** of Fletza, an AI learning platform. Additionally, I developed and taught practical and theoretical AI courses as an independent lecturer.

## Timeline



# Uranik Berisha

## Research

### Variance-Based Pruning for Accelerating and Compressing Trained Networks

Uranik Berisha, Jens Mehnert, Alexandru Paul Condurache  
ICCV 2025 · Oral (0.57% of submissions)

**Highlights:** Developed variance-based structured pruning. On DeiT-Base (ImageNet-1k), achieved a 1.11× inference speedup without fine-tuning while retaining 99% of baseline accuracy. At a higher pruning rate, reduced multiply–accumulate operations (MACs) by 35% and parameters by 36%, reaching 80.67% top-1 accuracy versus 81.73% for the baseline after 10 fine-tuning epochs.

### Efficient Data Driven Mixture-of-Expert Extraction from Trained Networks

Uranik Berisha, Jens Mehnert, Alexandru Paul Condurache  
CVPR 2025

**Highlights:** Developed expert extraction for pretrained Vision Transformers. On ImageNet-1k, reduced DeiT-Base MACs by 36% and parameters by 32%, retaining 98% of baseline accuracy after 30 fine-tuning epochs.

## Selected Projects

### Fletza (2025)

Built the frontend and backend, including study-set generation, user authentication and subscription payments.

**Technologies:** React, TypeScript/Deno, Supabase, OpenAI API, Stripe

### open62541 · EventFilter (2021)

Implemented OPC UA EventFilter validation and recursive filter evaluation, with tests and examples.

**Technologies:** C, CMake

### Parser Generator (2021)

Developed an interactive LR(1) learning tool for two bachelor’s theses. Implemented exercises on FIRST and FOLLOW sets, state construction and parser tables.

**Technologies:** JavaScript, HTML, CSS

## Teaching, Talks & Workshops

### AI Courses & Seminars

About 150 seminar attendees

Developed and taught courses on AI assistants and agents at work, and delivered seminars with practical exercises. Covered tool selection, checking results and responsible handling of work data.

### ICCV 2025 Oral Presentation

Audience of 1000+

Presented Variance-Based Pruning and its practical applications.

### Generative AI, Machine Learning & Deep Learning Workshop

40 students

Explained GPT training, next-token prediction, instruction tuning and learning from feedback.

## Expertise & Skills

Model pruning and compression, Vision Transformers, Mixture-of-Experts and computer vision.

### Programming Languages

|                         |       |
|-------------------------|-------|
| Python                  | ■■■■■ |
| JavaScript / TypeScript | ■■■■□ |
| SQL                     | ■■■■■ |
| C/C++                   | ■■■■□ |
| Java                    | ■■■□□ |
| Swift                   | ■■■□□ |

### Skills & Technologies

|                                       |       |
|---------------------------------------|-------|
| PyTorch                               | ■■■■■ |
| NumPy / Pandas / SciPy / scikit-learn | ■■■■□ |
| React / Node.js                       | ■■■■□ |
| Git / Linux                           | ■■■■■ |
| CUDA                                  | ■■□□□ |

### Languages

|          |       |
|----------|-------|
| German   | ■■■■■ |
| English  | ■■■■■ |
| Swedish  | ■■■■■ |
| Albanian | ■■■■■ |
| Spanish  | ■■■□□ |

**Licences:** Driving licence and sports motorboat licence.

**Interests:** Skydiving, basketball, Ju-Jutsu (green belt) and Taek-Won-Do (blue belt).