## Diploma Thesis

Microproccessors and Digital Systems Laboratory



## The Systems Programming One

<u>Rust</u> is a promising programming language with increasing adoption in a variety of domains. It emphasizes safety, performance and correctness of software along with control over what the hardware does.

Students undertaking this thesis will work in three phases:

- Learning Rust (2-3 months) → we will go through two books: (i) the Book and
  (ii) Programming Rust
- Studying a Rust codebase (1-2 months) → you can select any project you like. There are operating systems, deep learning frameworks, blockchain platforms ... choose your poison¹
- Designing your Baby (2-3 months) → at this point you will narrow your (certainly many!) project choices down to one, read the related literature, and come up with what you'll implement
- *Endgame* (2-3 months) → do your experiments, write your thesis, publish your code, start your next job search from a position of power

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 $<sup>^{1}</sup>$  You could, for instance, choose the Rust ecosystem  $\underline{itself}$  as your target! Or you could give  $\underline{some\ work\ of\ our\ own}$  a go.