BS and MS thesis works

—

of high quality

Make MIPT thesis works the art

- The thesis works is submitted to publish
- The code is ready for inheritance
- The defences delivers a clear scientific message

The problems

- BS students start scientific research too late
  (the hard case is two weeks before defence)
- MS students work somewhere (the hard case his daily routine is more complex)
- Supervisors spare time or lacking planning skills (the hard case both)

In a nutshell: to create a system how to

1. Guide a student through research
2. Facilitate a supervisor to conduct research
3. Series of research reports (each semester)
   make a way to create thesis works of high quality
4. Elaborate a consistent system and rules of work quality evaluation
5. Share the works proudly as the main university indicator product

My first scientific paper
at MIPT, Intelligent systems
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m1p.org

Present state of the course

- Machine learning: papers with code

- 10 years of delivery, each spring for undergrads, 3rd year

- More 400 projects in SourceForge, more 100 projects in GitHub

- Typical group: 27 students, each has a MS-graduate supervisor and a professor as expert (up to 30 support participants)

- Maximum load group 172 students

- Most wanted result was: 11 papers published by a group of 12 students

- Youtube channel: 120 student talks

The course impact

- Guarantees BS and MS thesis works of good quality

- The student thesis works show high standards of education at MIPT

- Our students have several papers published before MS degree

- Student with papers looks competitive in the market of industry and science

- Advisors and laboratories receives "ready-to-scientific-research" students

- Grants and prizes go to students with papers

Plans and problems

Expand the course to

1) all students of SAMI at MIPT
2) students of friendly labs over the world

Problems

1) student has difficulties in searching supervisor
2) supervisor has difficulties in research planning (risk estimation part)
3) supervisor expects student as time vaste and burden (routine vs research)