

Software Engineering Education in Nanjing University



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2018.6 @NTNU

Outline

- Overview of Software Institute (SWI) in Nanjing University
- Curriculum
- Industry Cooperation and Internship



CSAI in NJU

- There are Department of Computer Science(1978), Software Institute(2002), Artificial Intelligence Institute (2018) in Nanjing University related with software.
- Different curriculum for different requirements, science research(CS), engineering(SWI), AI research and application(AI).
- All faculty and students engage in research in State Key Laboratory for Novel Software Technology at Nanjing University.



Software Institute of Nanjing University

- Founded in 2002, Software Institute (SWI) of Nanjing University (NJU) is one of the 35 **national software schools** approved by the Ministry of Education and the National Development and Reform Commission.
- Based on international curriculum recommendations to the rapidly changing landscape of Software Engineering and national conditions in China, SWI provides excellence in education for the future leaders of Chinese IT corporations.



Software Institute of Nanjing University

- As the “National Main Course Teaching Team in Software Engineering,” SWI has a faculty of 35, with 13 professors and 10 associate professors.



Students of SWI

- There are nearly 920 undergraduates registered in SWI with around 600 in the master and doctoral program.
- The quality of employment of students at SWI is the best in Nanjing University, and the highest starting salary for graduation.
- Undergraduate admission: top 0.5% (China National College Entrance Examination)



SE Undergraduate Curriculum

Application
Areas

Data Science, Information System, Embedded
System,...

Software
Engineering
Courses

Requirements Engineering, Software
Construction, Software Design and Architecture,
Software Process and Management, Software
Test and Quality, Empirical Software
Engineering, Human - Computer Interaction, ...

Emphasizing SE
tool chains

Computing
Fundamentals

Computing System Fundamental, Data
Structural and Algorithm, Networking, Discrete
Mathematics, ...



Graduate Curriculum for Software Engineers

- Cloud first technology courses.
 - Cloud Computing, Big Data, Software Architecture(Micro Service...), Advanced Software Design, ...
- Agile and DevOps.
 - Software Engineering and Management, Agile Software Development and DevOps, ...
- Application area courses.



Internship

- SWI has built good cooperation with industry companies.
- >80 internship partners
 - Microsoft, Alibaba, Tencent, Huawei, Xiaomi, Startups,...
- Master student: >10 months (compulsory)
- Undergraduate: 6 months (optional)



SE education cooperation with local technology community

- NJSD (Nanjing Software Software Developer) conference, >1400 attendees, from 2015, the biggest software development conference in Nanjing
- Skunk lab, products development community
- DevOps China
- Agile Club



Students join the conference and meet-ups to learn from technology community.

Invited industry experts talks

Cooperation Courses (Product Manager Course...)



Thanks

