

『清华信息大讲堂』第 42 讲

| 报告题目: | On the relative value of cross-company and within-company data for defect prediction | |
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| 报告 | Prof. Tim Menzies | |
| 人: | West Virginia University | A AN |
| 报告时间: | 2009年11月25日 14:00-15:00 | |
| 报告地点: | FIT 楼1-415 | |
| Abstract: | | 21221 |

In our previous work, we have discovered that software production is far more uniform than we ever imagined. We often assume software systems are very different, that (e.g.) mission critical systems are fundamentally different to simpler systems. But this is not necessarily true. Some of the code built by developers of software for (e.g.) Turkish white goods contains striking similarities to (e.g.) NASA flight software. Defect predictors learned from one of these sites can be applied to the other-provided that the training examples are carefully selected. This very strange result has been reproduced now in half a dozen separate experiments and suggests a new picture of software development as a large number of "mini-tasks", many of which are shared in different projects.

In this seminar, Dr Menzies will introduce the latest development of software defect prediction techniques, and point out how they can be used for quality improvement cross-company and within-company.

Biography:

Dr. Tim Menzies has been working on advanced modeling and software engineering since 1986. He is internationally recognised for his contributions to software quality assurance and prediction. He is the author of over 180 refereed papers, including 30 international journal articles and 17 book chapters and editorials. He has served on the editorial board of international journals, and on the PC of many numerous interational conferences.

Dr. Menzies is now an associate professor at the West Virginia University's Lane Department of Computer Science and Electrical Engineering. Previously he was Software Engineer Research Chair, NASA IV&V. In that role, he monitored and assessed NASA research projects and proposals, and taught graduate software engineering courses. Also in that role, he introduced research quality indicators for NASA programs.

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