**CS 49000-020 Software Testing**

**Software Testing: A sample set of tools**

**Fall 2009**

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| **Purpose** | **Tool** | **Provider** | **Comment** |
| Test automation: design and execution | TestArchitect | LogiGear | Scripting using Action Words |
|  | WinRunner | HP/Mercury | Record and replay. TSL for scripting; very rich scripting language |
|  | Rational Robot | IBM |  |
| Test generation: black box, combinatorial designs | ACT | NIST | Available at no cost |
|  | AETG | Telcordia Technologies |  |
| Test generation: white box | KLEE | Stanford |  |
|  | Pex | Microsoft | Available at no cost |
| Load/Performance testing | LoadRunner | HP |  |
|  | JMeter | Apache | Open source |
|  | SilkPerformer | Borland |  |
|  | Rational Performance Tester | IBM |  |
| Regression testing | SilkTest | Borland |  |
|  |  |  |  |
| Testing concurrent programs | ConTest | IBM |  |
|  |  |  |  |
| Functional testing | Rational Functional Tester | IBM |  |
| Runtime analysis | Rational Purify Plus | IBM |  |
| Testing real time software | Rational Test RealTime | IBM |  |
|  | UPPAAL | Uppsala University, Sweden and  Aalborg University Denmark. | Available at no cost |
| Defect tracking and management | FogBugz | Fogcreek |  |
|  | BugZilla | Bugzilla.org | Open source |