

Examples of previous projects

→ During the summer of 2000 several students worked with an industry partner to develop a software system for analysis of forensic evidence of computer system intrusions. The study used traditional UML to describe the system design, but since the system's data artifacts could be used as evidence in a court of law, correctness had to be provable. The team validated the traditional UML design artifacts using Z and proved various properties about the system.

Deliverables: the Java applets and the report.

→ A software measurement program is established using ideas from the Managing Software Development core course and the Software Measurement elective.

Deliverables: the new metrics policy and the report.

→ A design has been created using structured methods. A conversion to an object-oriented system is done using UML notation.

Deliverables: the UML documentation and the report.

→ An experiment is conducted to determine the effectiveness of using three persons versus four persons per inspection.

Deliverables: the report, including a reasonable data analysis.

→ A software specification has been created using structured English. It is rewritten in Z.

Deliverables: the new specification and the report.

→ A CMMI tool for evaluating organization readiness for assessment.

Deliverables: new tool and report