THE CASE OF THE KILLER ROBOT

The case of the killer robot consists of seven newspaper articles, one journal article and one magazine interview. This scenario is intended to raise issues in computer ethics and in software engineering.

The persons and institutions involved in this scenario are entirely fictitious (except for the references to Carnegie-Mellon and Purdue Universities and to the venerable computer scientists: Ben Shneiderman and Jim Foley). Silicon Valley was chosen as the location for the accident because Silicon Valley is an icon of high technology. All of the persons and institutions named in Silicon Valley are purely fictitious.

The cast of characters

Alex Allendale, Attorney, hired to defend Randy Samuels.

Jan Anderson, former programmer and analyst at Silicon Techtronics. She opposed the use of the waterfall model on the robot project and was fired for her honesty.

Turina Babbage, president of the Association for Computing Machinery (ACM). She announces an investigation by the ACM into violations of the ACM Code of Ethics by employees at Silicon Techtronics.

Robert Franklin, reporter for the Silicon-Valley Sentinel Observer. He interviewed Professor Harry Yoder in order to see how an ethicist would view the developments in the killer robot case. The interview was published in the Sentinel-Observer's Sunday magazine.

Horace Gritty, Professor of Computer Science and Related Concerns at Silicon Valley University. He sees poor interface design as a primary cause of the killer robot tragedy.

Sandra Henderson, graduate student at Silicon Valley University. She assisted in the investigation into quality assurance procedures at Silicon Valley University.

Ray Johnson, Robotics Division Chief at Silicon Techtronics. The Robotics Division needed a successful robot.

Martha, anonymous newspaper source. She is the insider at Silicon Techtronics who gave the Silicon Valley Sentinel-Observer information about the group dynamics on the Robbie CX30 robot project.

Bart Matthews, robot operator. A faulty computer program caused a Robbie CX30 robot to strike him dead.

Roberta Matthews, widow of Bart Matthews.

Jane McMurdock, Prosecuting Attorney for the City of Silicon Valley. She brought the manslaughter charges against Randy Samuels.

Mabel Muckraker, reporter for the Silicon Valley Sentinel-Observer. She was put on the killer robot story because of her reputation as an effective investigative reporter.

Bill Park, Professor of Physics at Silicon Valley University. He confirmed that Randy Samuels misinterpreted the robot dynamics equations.

Randy Samuels, programmer. He wrote the program code that caused the Robbie CX30 robot to oscillate wildly, killing the robot operator, Bart Matthews.

Sam Reynolds, CX30 Project Manager. Ray Johnson was his immediate boss. His background was in data processing, but he was put in charge of the Robbie CX30 project, much to Ray Johnson's chagrin. He was committed to the waterfall model of software development.

Robbie CX30, the robot. Robbie never had an unkind thought about anyone, yet he turned into a savage killer.

Wesley Silber, Professor of Software Engineering at Silicon Valley University. He conducted a review of software quality assurance procedures at Silicon Techtronics.

Sharon Skinner, Professor of Software Psychology at Silicon Valley University. She saw Randy Samuels as a task-oriented person who was overly sensitive about criticism.

Valerie Thomas, Attorney, hired by Sam Reynolds.

Michael Waterson, President and CEO of Silicon Techtronics. Placed Sam Reynolds in charge of Robbie CX30 project as a cost-saving measure. He contributed generously to Jane McMurdock's re-election campaign. He hired Dr. Silber to conduct an investigation into software quality assurance at Silicon Techtronics.

Max Worthington, Chief Security Officer for Silicon Techtronics. He monitored electronic mail communications among the employees and thus exposed Cindy Yardley.

Ruth Witherspoon, programmer-analyst and spokesperson for the "Justice for Randy Samuels" committee. She defends Randy Samuels on the grounds that Silicon Techtronics was legally obligated to deliver a safe robot.

Cindy Yardley, Silicon Techtronics employee and software tester. She admitted to faking software tests in order to save the jobs of her co-workers.

Harry Yoder, Samuel Southerland Professor of Computer Technology and Ethics. He examines the tension between individual and corporate responsibilities in an interview published by the Sentinel-Observer's Sunday magazine.