Rether Networks Inc.

- Rether Networks Inc.: A minority, woman-owned small business specializing software security and network management

- Lead Investigator: Dr. Tzi-cker Chiueh

- Current Team Members:
  - Dr. Lap-chung Lam
  - Dr. Prashant Pradhan
  - Mr. Ian Cheng

Research Areas of Interest

- Methods to add dynamic checks to C/C++ programs so as to confine their execution and prevent known weaknesses from being exploited

- Techniques to instrument and diversify binary programs so that residual vulnerabilities will be more difficult for attackers to discover or exploit

Unique Capabilities

- An analysis and instrumentation framework for commercially distributed Win32 binaries (those without symbol table)

- Fastest array bound checking compiler for C/C++ programs on X86 ➜ less than 10%

- Application-specific sandboxing technology for Win32 binaries (i.e. Internet Explorer) that defeats mimicry attack through randomly inserted system calls

Looking for Partners

- Source and binary code analysis to identify potential bugs
- Advanced and efficient randomization techniques for binary programs

Contact Information

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