

# Measuring and Modeling Patching at Scale

<http://www.umiacs.umd.edu/~tdumitra/research-patching-models.html>

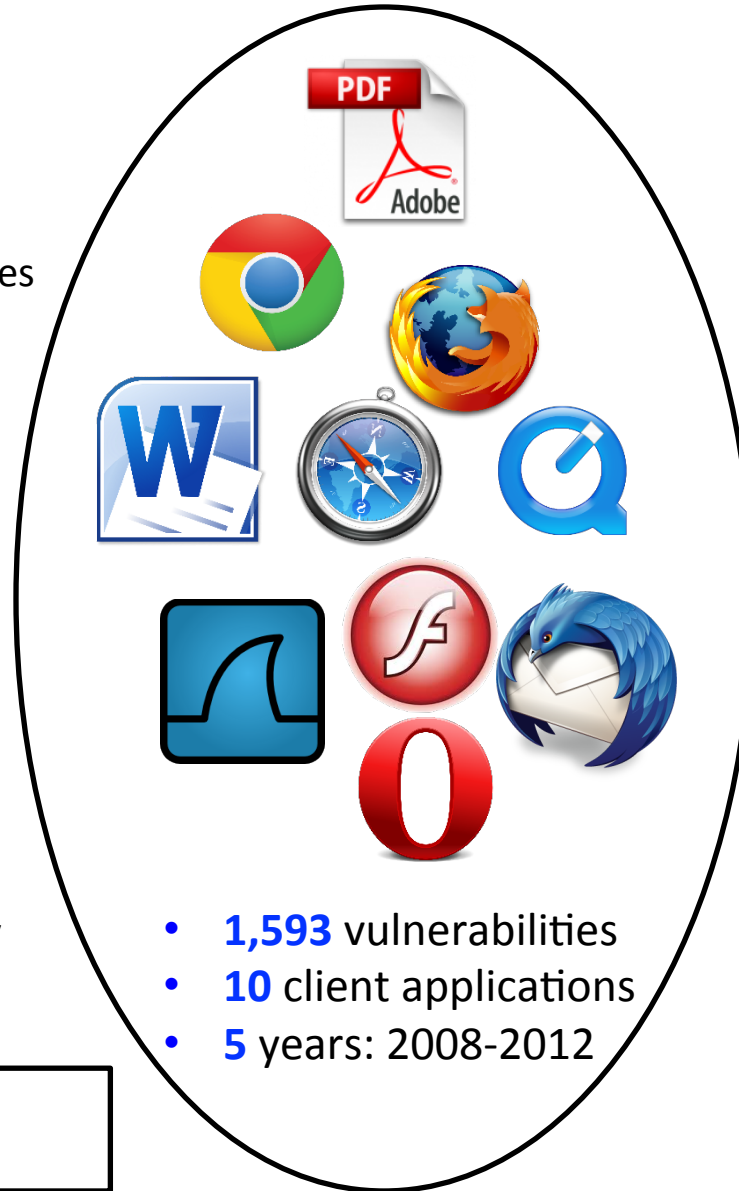


## Challenge:

- Does patching improve security?
- Can we patch vulnerabilities faster than attackers can exploit them?
- What factors delay the patching of software vulnerabilities?

## Solution:

- **Measure** patch deployment at scale
- Create **analytical models** for the vulnerability decay process



## Scientific Impact:

- Understand practical barriers for patching
- Provide foundation for future software updating mechanisms

## Broader Impact:

- Work with Symantec to test ideas in an industrial environment
- Release data sets with augmented information about software vulnerabilities