

TCP characterization

- With students, we have built **tbit** methodology into scamper and investigated modern TCP behavior
- IMC 2010: Measuring **Path MTU Discovery** Behaviour
 - 5-18% failure rate; Bugfixes in implementations
- IMC 2015: Resilience of Deployed TCP to **Blind Attacks**
 - 38% of systems tested vulnerable to at least one blind attack
- Many other tbit tests reproduced, and new ones devised and built into scamper
 - **ICW, SACK, Fast-Open, ECN, QuickStart, ABC, ...**
- Engagement with IETF: would appreciate feedback on relevant tests to pursue in the next year.