Evaluation Highlights:

- Extracted interfaces for 12 Network Functions, 12 programs from OpenSSL
- 3 Network Functions used in production: Meta, Scaleway, Cilium
- Extracted interfaces are simple, precise and quick to extract
- 100-1000x shorter than implementations
- Average prediction error < 10% across multiple deployments
- Take < 25 mins to extract even for production NFs
- PIX-extracted interfaces are useful to developers & operators!
- Developers: automatically find performance bugs/regressions:
  - Found 15% latency in Meta’s load balancer
  - Found constant-time violation in OpenSSL 3.0
- Operators: Informed development decisions
  - Pick right Network Function for deployment hardware (NIC)
  - Diagnose root-cause of in-production performance anomalies

Performance interfaces summarize the latency of a system simply and precisely, just like semantic interfaces summarize functionality