

# DoHoT or Donion aka “DoHoT 2 Handle”

Performance of Anonymous DNS Queries

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# Introduction

- ❖ Anonymous Queries
- ❖ Proxy between Client and Resolver
  - ❖ Oblivious DNS
  - ❖ Oblivious DNS-over-HTTPS (ODoH)
  - ❖ DNS-over-HTTPS-over-Tor (DoHoT)

# Protocols

**Default:** Client → Entry → Middle → Exit → DoH Resolver

**Idea 1:** Client → Nearby Entry → Nearby Exit → DoH/DoT Resolver

**Idea 2:** Client → Nearby Entry → Nearby Exit Resolver

- ❖ Normal DNS (Do53)
- ❖ DNS-over-HTTPS (DoH)
- ❖ DNS-over-TLS (DoT)
- ❖ DNS-over-Tor (DoTor)
- ❖ DoH-over-Tor (DoHoT)
- ❖ DoT-over-Tor (DoToT)

# Measurement

A single query via a fresh protocol  $X$  times: `DNSHACKATHON- $\{\text{random}\}$ .se`

TODO: Graph

# Artifacts

<https://github.com/DNS-Hackathon/DoHot-or-Donion>

- ❖ Docker Containers for Protocols
- ❖ Performance Measurement Interface