

BLACK HOLE ROUTING FOR ENHANCED NETWORK SECURITY

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Problem + Background

- BHR is a technique that **redirects suspicious traffic** to a 'void'
 - Stops interactions w/ core systems.
- Duke's Security Office uses an outdated implementation of BHR to **block 1M + bad IPs daily**.

Key Features

- **Core Functions**
 - Add, update, & remove IPs
 - Search & view detailed IP info
- **Backend**
 - Role-based access control
- **UI Enhancements**
 - Interactive dashboards
 - IP traffic & trends
 - Customizable skinning for fast cross-institutional deployment

Future Plan

Performance
Optimization



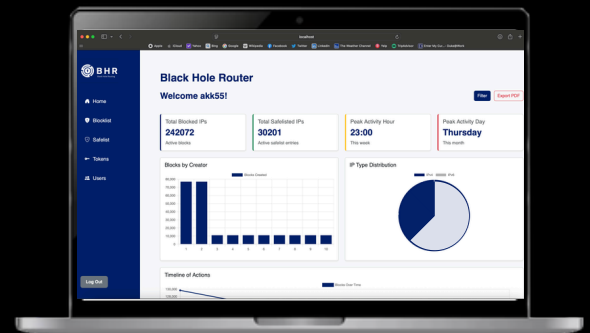
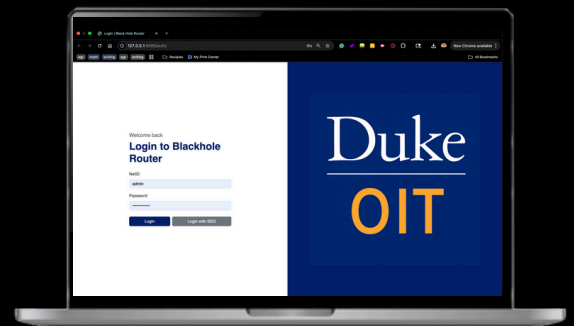
Shibboleth
Integration

UI
Enhancements



Our Solution

A modern, full-stack BHR web app to manage 2 million+ malicious IPs in real time.



SQLAlchemy



SCAN FOR MORE INFO



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