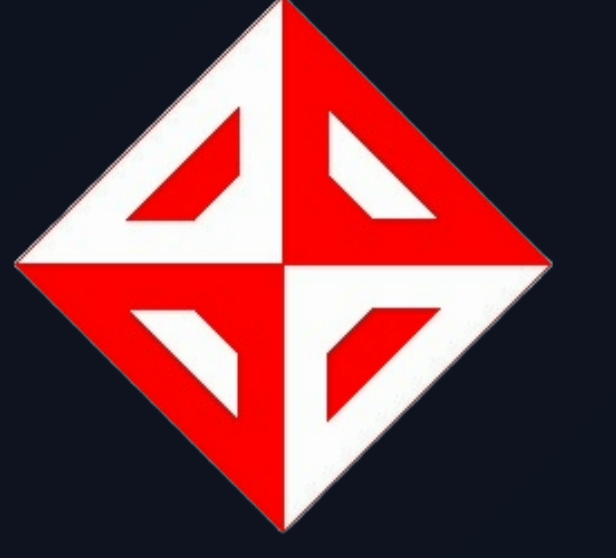




NURT:



Network IDS at scale.

NETWORK UTILITY FOR REAL-TIME THREAT DETECTION



Active Mitigation

Dynamically bans malicious traffic for a limited time upon detection. Enables manual IP blocking via the user dashboard.



New ML Model Integration

Highly customizable architecture allows users to integrate their own trained Machine Learning models alongside native presets.



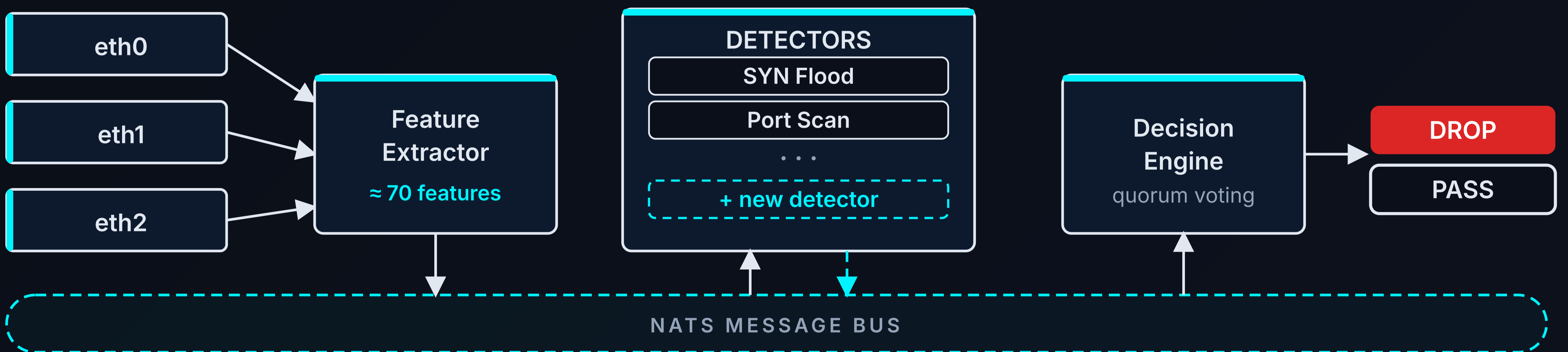
Scalable Microservices

Built entirely on a highly available Kubernetes structure, ensuring continuous uptime and elastic scaling under load.



Smart Traffic Routing

Redirect specific IP ranges and ports to dedicated worker pods, applying distinct ML models to distinct attack vectors.



Supervisor: Prof. Dr. Ertan Onur

Team: Ozan Yanık, Oktay Elibüyük, Fatma Ezgi Uçar, Emre Alp Usta

Contact: ozan.yanik@metu.edu.tr, oktay.elibuyuk@metu.edu.tr,

fatma.ucar@metu.edu.tr, alp.usta@metu.edu.tr