



Prague



# Three Pillars of Mobile Fintech App Security

50

Technology **Fast 50**  
2019 CE **LAUREATE**  
Deloitte.

Laureate of the 2019 Deloitte  
Rising Star award



# Core Competencies



## Authentication

#SCA #Crypto #Token



## Mobile Security

#RASP #AppShielding



## Digital Identity

#OpenBanking #BankID



# Key References



Equa bank



fidoo

HOME  
CREDIT

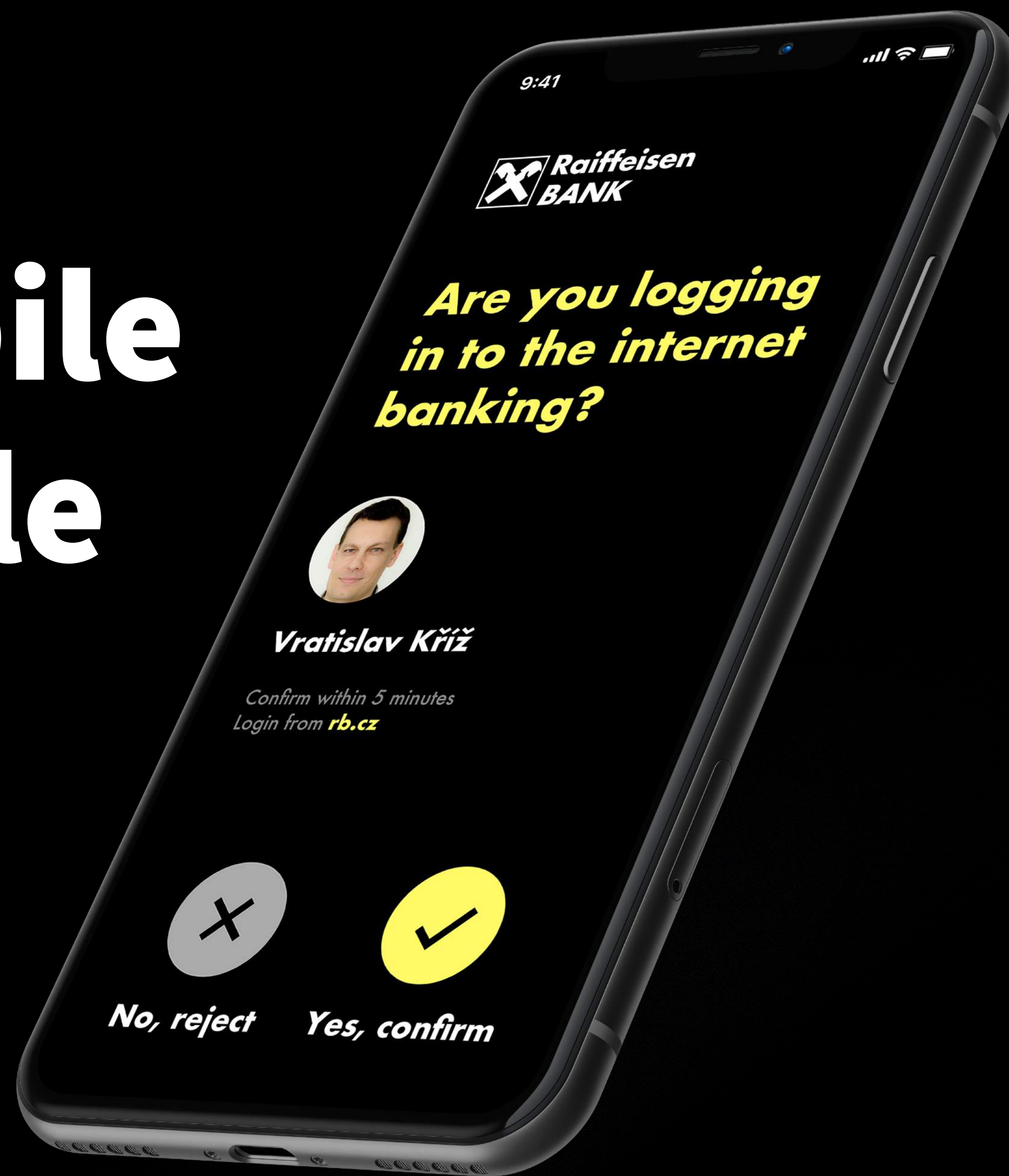


POSTA SHQIPTARE



zonky.cz

# Digital Finance is Not Just Mobile First, it is Mobile Only.







**50%**

**of European customers use**

**Mobile Banking App**

**at least once a week**

**Users initiated**

**26% More**

**Mobile Banking Sessions**

**in 2020**



Users spent

**49% More**

**Time in Payment Apps**

**in the first half of 2020**



**Users mention**

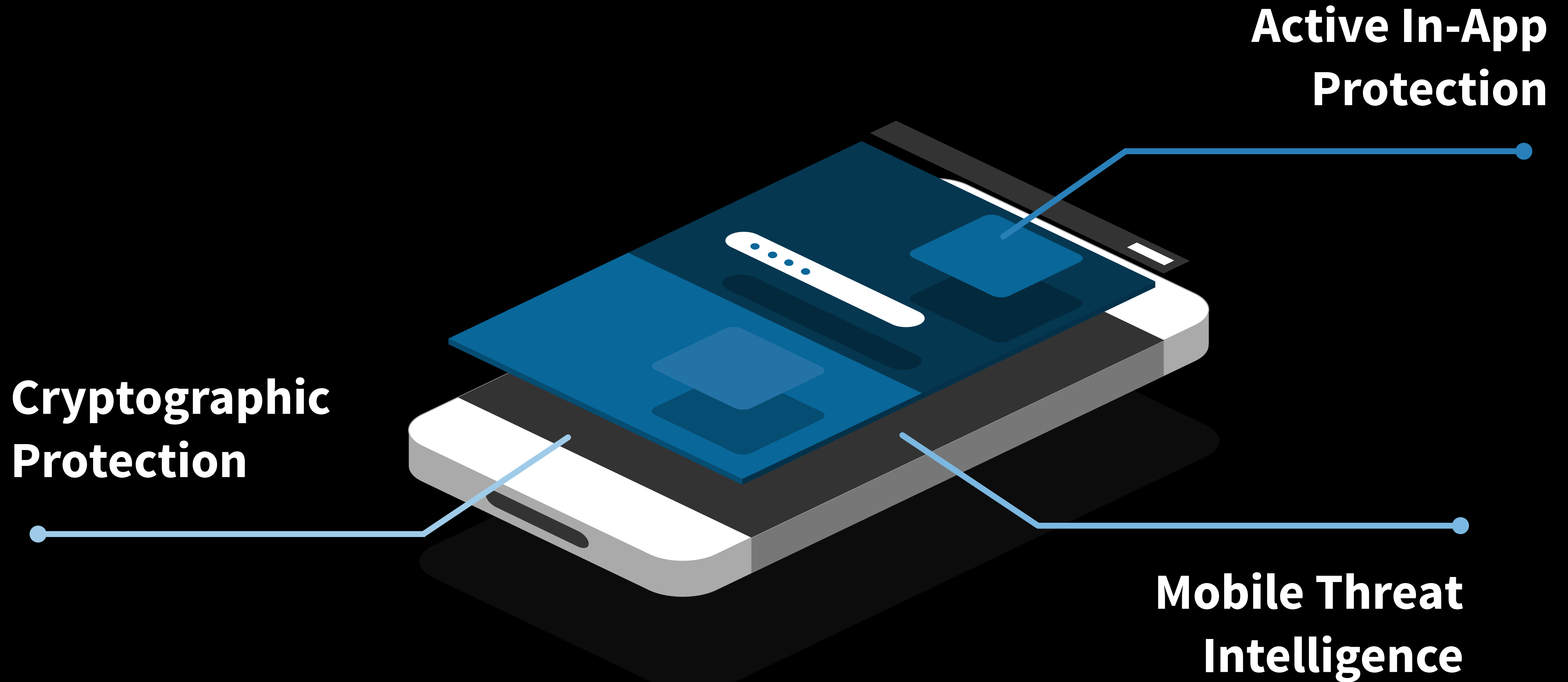
**SECURITY**

**As the 2nd Biggest Concern**

**when using mobile banking**



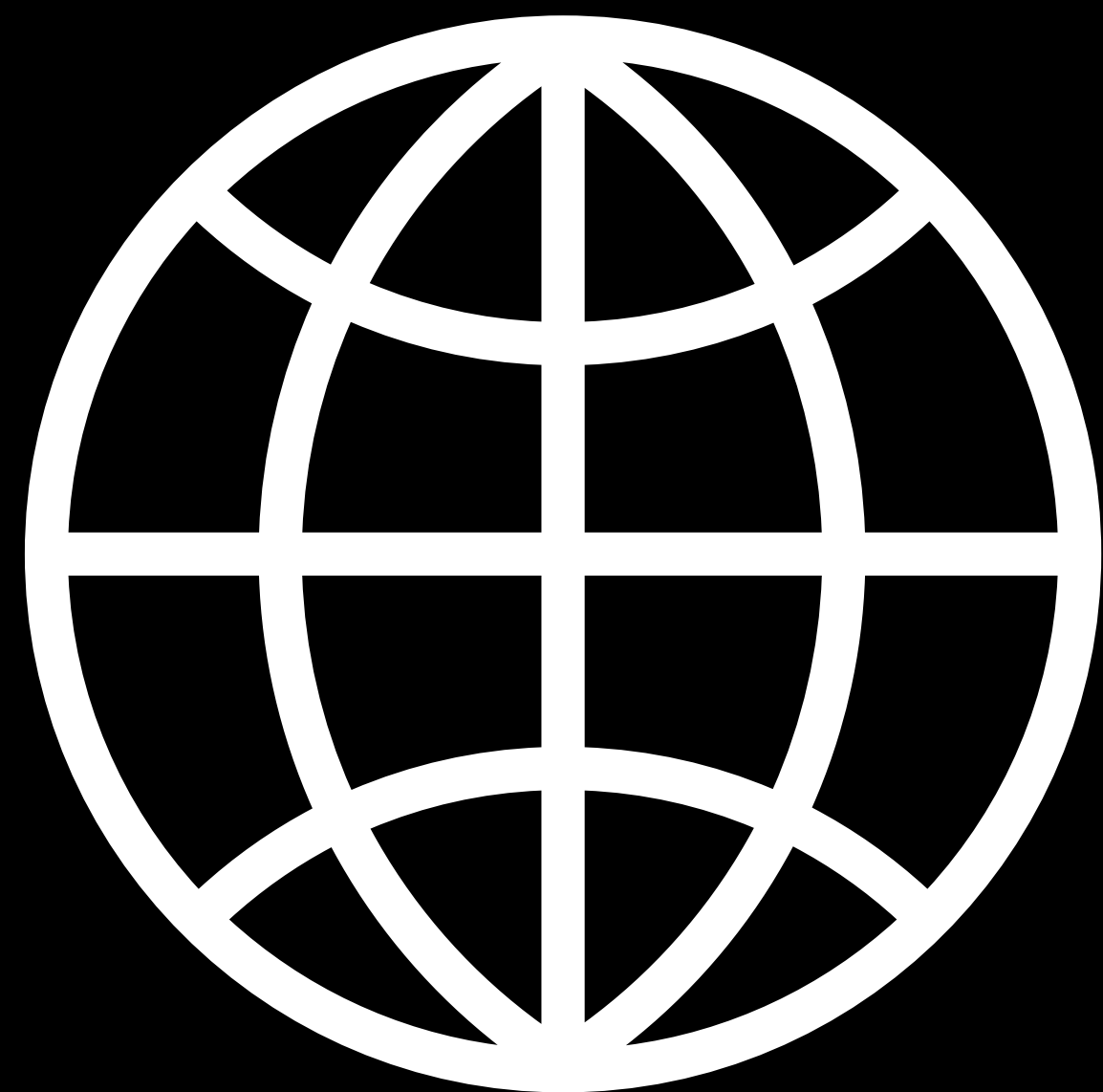
# Mobile Security Pillars



**1.**

# **Cryptographic Protection**





**Fintech Mobile App  
Back-End Systems**



**Cryptographic  
Algorithms**







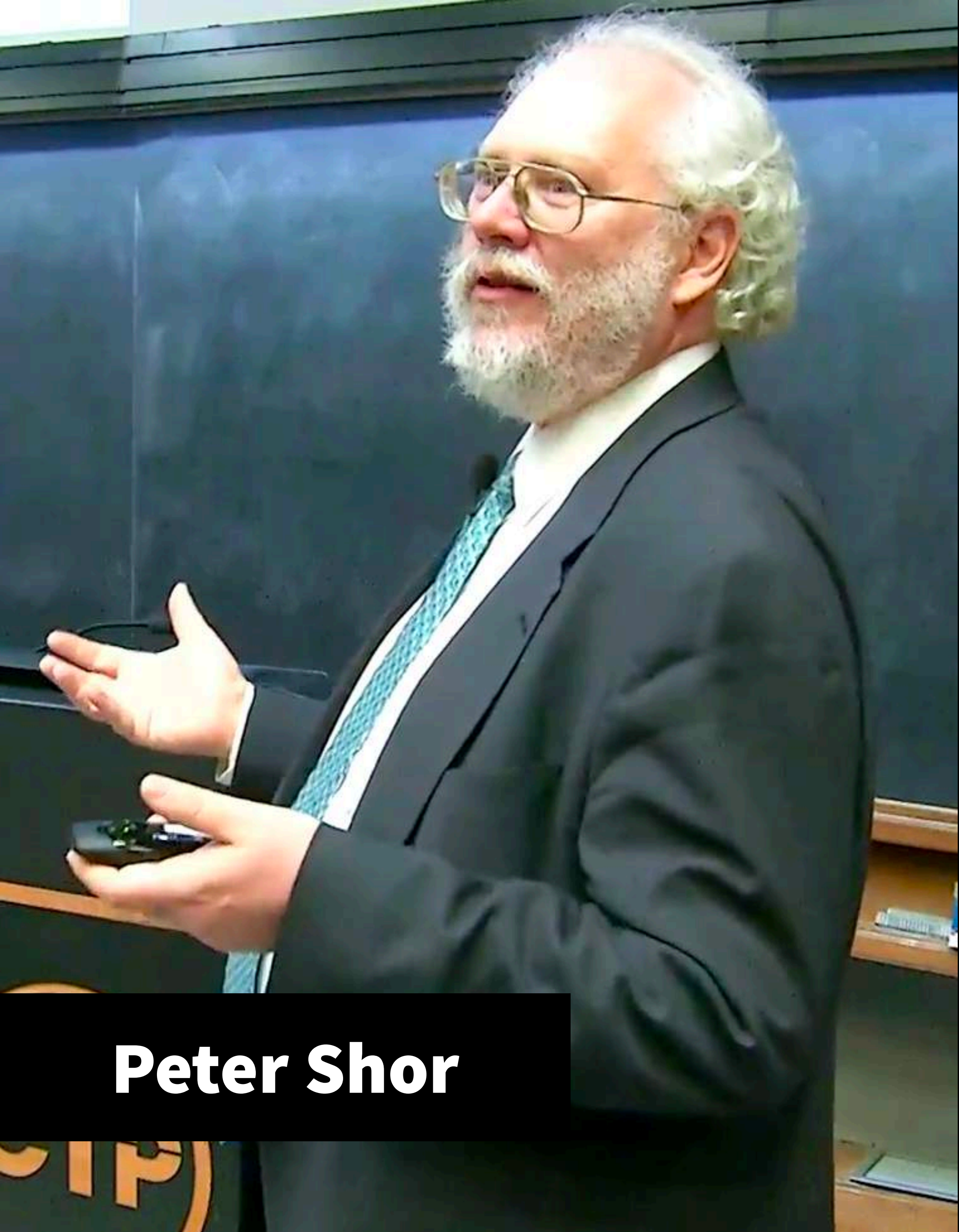


# Rise of Quantum Computers

The cryptographic algorithms we currently know and take for granted (RSA or ECC) are threatened by a new computational paradigm.







**Peter Shor**

**Shor's Algorithm**  
**Solves integer factorization**  
**and discrete logarithm**  
**problems in polynomial**  
**time.**



# Quantum Resistant Systems

Fortunately, **post-quantum cryptography** based on different mathematics (lattices, supersingular isogenies) emerges.

**We will help you make your apps "quantum resistant."**



2.

**Active In-App Protection**



# Malicious Apps

on mobile devices skyrocketed to

**5,683,694**

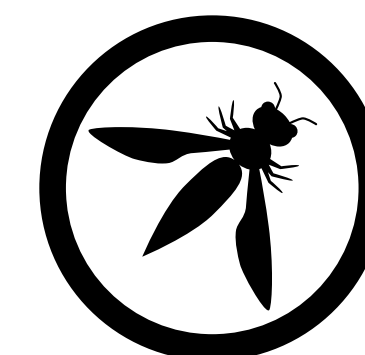
in 2020

# Rise of Mobile Threats

- ▮ By 2022, at least 50% of successful attacks against clickjacking and mobile apps could have been prevented using in-app protection.



**Market Guide for  
In-App Protection**



**OWASP**  
Mobile Application Security  
Verification Standard



# Mobile App Shielding

Integrity Checks

Obfuscation

Malware Protection

Personal Data Protection

Runtime Protection

Active Security Measures



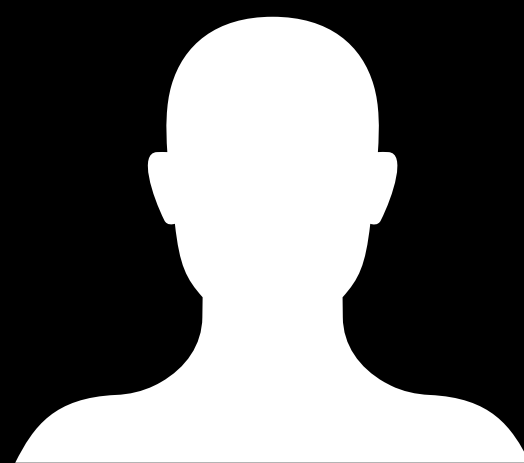
**We will protect your apps against cyberthreats.**

3.

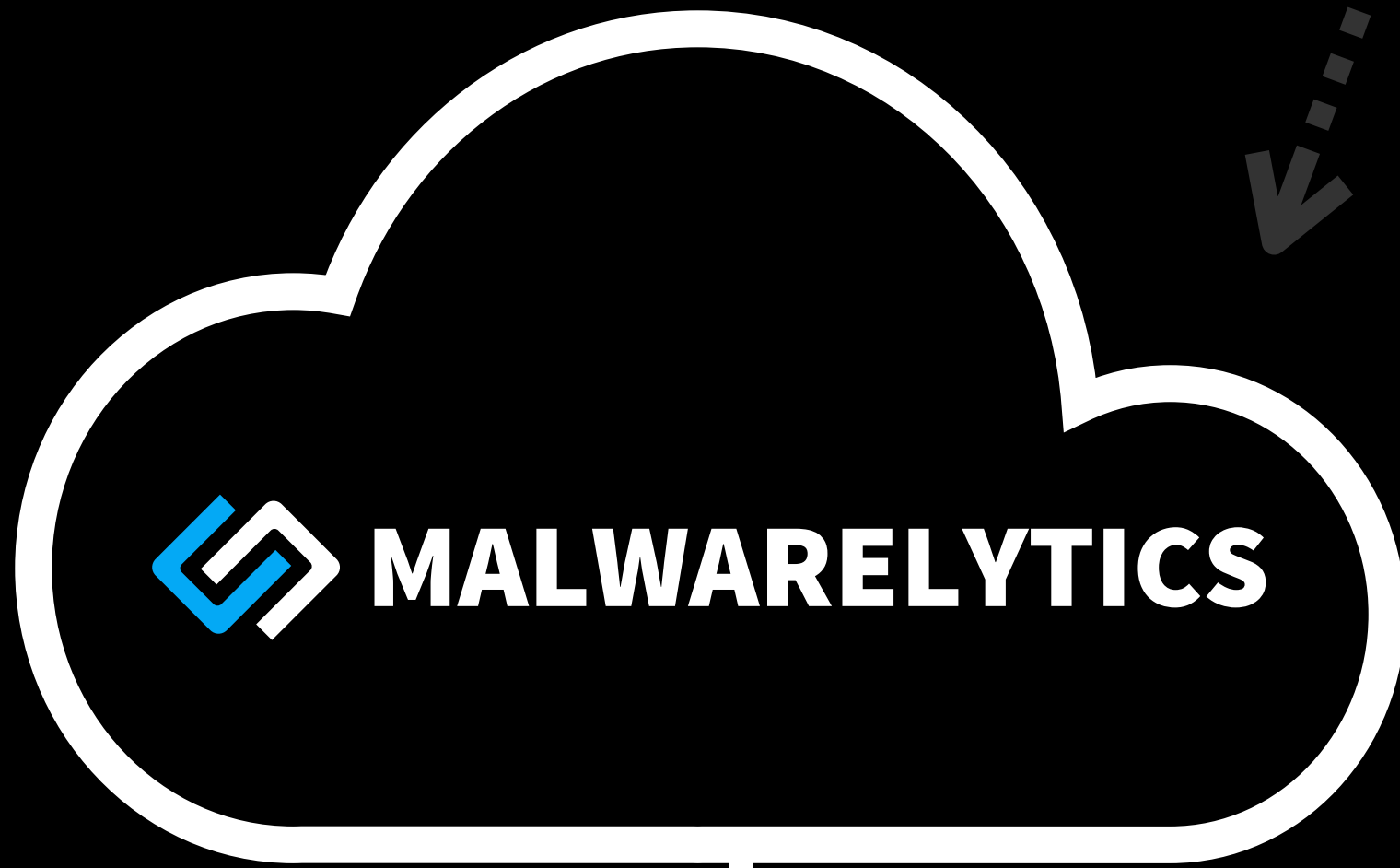
**Mobile Threat Intelligence**



SDK



App User

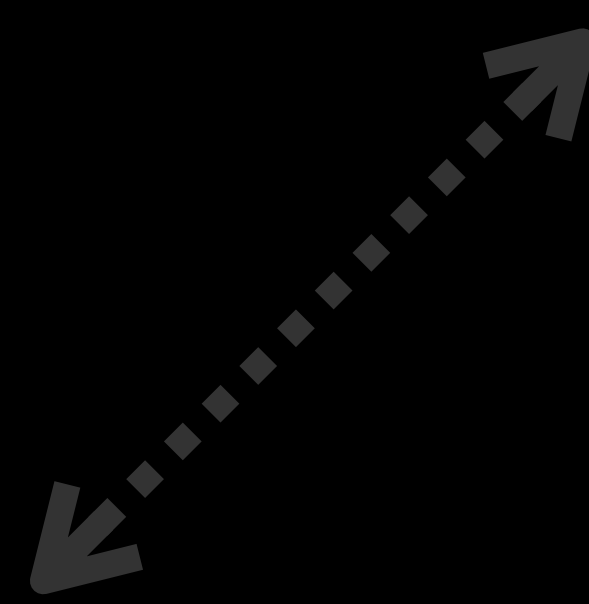
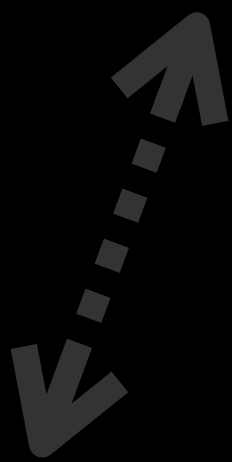


API, webhooks



50+ AV Engines

8 more databases





# Malwarelytics Web Console

The image displays two screenshots of the Malwarelytics web console interface.

**Left Screenshot: Threat Insights Dashboard**

- Package Name:** Search bar
- Threat Insights:** Overview of device status
- Statistics:**
  - 506 INFECTED
  - 100 HEALED
  - 116k RISKY
  - 515k ACTIVE
- Active Malware:** Table showing malware instances

Application	Signatures	Threat Level
<b>com.android.snap</b> com.gangyun.beautysnap	<ul style="list-style-type: none"><li>aac130debc6bcb5e54b43a4467095d6329c2a77461...</li><li>d584785f4eb61320818f69a121607f5479a038d4</li></ul>	MALWARE
<b>ControllerPC</b> com.moboalien.salyam.controller	<ul style="list-style-type: none"><li>931c593737a7fca2ed192d143d5e08d116316810fb...</li><li>834e4bccdd59f1571ac60094e4ee8b9b235fea1</li></ul>	MALWARE

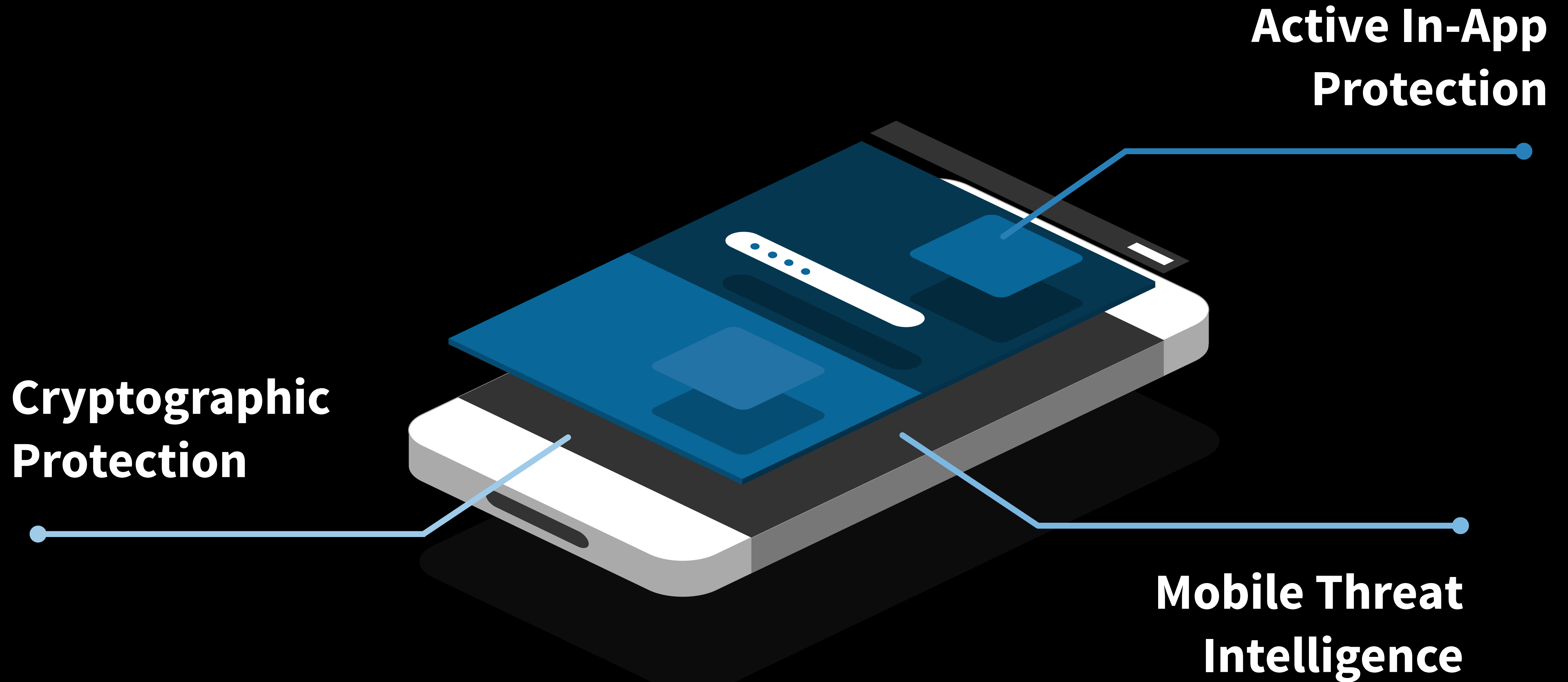
**Right Screenshot: Package Detail View**

- APK Signature:** Search bar
- Package Detail:** Overview of the application
- Basic Information:**
  - Package: system.browser2.acore
  - Name: com.google.browser
  - Version Code: 1
  - Version Name: 2.3.44
  - APK Size: 1.04MB
  - APK Signature: e93e877f6d76466c5769773dc62fb1a9f4417485fcc5830bf83ecc692f7ddac3
  - Certificate Signature: 894635e1e0e3610578c4b9b6b4aabee77175f1d9
- Threat Level:** 100/100 (MALWARE)
- Notes:** VT 26/7, HEUR:Trojan.AndroidOS.Boogz.gsh, Android/Guerrilla.AJ
- Flags:** Table for tracking flags

Flag Name	Origin System
OUTSIDE GOOGLE PLAY	SYSTEM

We will show you the threats in your mobile user base.

# Mobile Security Pillars







# Developer Portal

<https://developers.wultra.com/>

# Thank You!

Let's connect  
on LinkedIn!



Leading banks and fintech  
companies already trust  
the authentication  
technologies by Wultra.

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