



Aptoid
Your Android App Store

H2020 Partner Search

João Casal (Head of R&D)

1. About Aptoide app store
2. Ongoing R&D and Innovation projects
3. Calls of interest + What we can offer

João Casal (Head of R&D)
joao.casal@aptoide.com



1. About Aptoide app store

- Portuguese **SME with global reach** that has as main product a **mobile marketplace**

220 million	15 000	900 000	>7.6 billion
unique active users 2018	partnerships app developers	apps available	downloads

- **“One of the most promising European startups”** (Wired Magazine, 2018)

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2. Ongoing R&D and Innovation projects

1. AppCoins (2017-...)

Initial Coin Offering (over 15.6M\$)

Blockchain

Applied for (1) **in-app purchases**, (2) **app approval** and (3) **user acquisition**

Use case with 220 million users

2. AppSentinel (2018-2020)

National Funds for R&D

Cybersecurity

Cloud

AI

Discovery of New Threats - Machine Learning on top of static and dynamic analysis of apps

Reduce Malware Impact – Feedback to developers about their apps vulnerabilities

3. TrustChain (2018-2020)

National Funds for R&D

Blockchain

Cybersecurity

Blockchain-based reputation systems for efficient cybersecurity processes

4. AppRecommender (2019-2021)

National Funds for R&D

AI

Cloud

Semantic Search Engines and **Recommendation systems** for app stores

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3. Calls of interest + What we can offer

ICT-15-2019-2020: Cloud Computing (28 March)

i. Significant **use cases and testbeds**: over **200 million mobile users**

ii. Real-world **challenges with high impact** in a huge economy (app economy):

- heavy cloud infrastructure - over **500 Terabytes of transactions per day**
- challenges of **efficiency** (costs and energy), **quality of service** (downloads, search engine and quality assurance) and **data privacy and security** (payments and user data)
- **Potential solution: Mobile Edge Computing?**

3. Calls of interest + What we can offer

ICT-13-2018-2019: Supporting the emergence of data markets and the data economy (28 March)

- i. Significant **use cases and testbeds**: over **200 million mobile users**

- ii. Considerable **blockchain experience in a huge marketplace**: can be used for building **trust, transparency and control** across data platforms and the data economy

3. Calls of interest + What we can offer

SU-ICT-02-2020: Building blocks for resilience in evolving ICT systems (19 November)

i. Significant **use cases and testbeds**:

Mobile malware is a "moving target" problem. Quality assurance and cybersecurity services face severe challenges to evolve fast enough.

Ex.: Aptoide receives **over 10.000 new apps per day**.

ii. Considerable **research experience in cybersecurity in mobile ecosystems**:

- **Static and dynamic analysis** of code
- **Machine learning** and **decision support systems** for human operators
- **Reputation systems** based on Blockchain
- Prevention through feedback about **software vulnerabilities**

Thank You

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