



**CEPIA**  
**TECHNOLOGIES**

# About Cepia



- Small research company
- Started operation 3<sup>rd</sup> January 2009
- Located in Brno (Platinum at Veveri)
  - Secure offices for 25 people over 2 floors + meeting rooms and reception
  - Own ICT with high level of security for own research and production
  - Very comfortable working environment for staff

# What we do?

- Main focus on developing crypto analytical systems and data mining tools for governmental customers
  - Strong focus within research activities
  - Maintaining high academic standards for our staff
  - Dedicated to building bleeding edge systems
- Developing data/signal acquisition systems to mate with our crypto analytical systems
- Search and Rescue systems for airborne applications

# Current and future projects

- Time-memory Trade-off (TMTO) attacks
  - A5/1, A5/2, A5/3 & Kasumi, GEA1/2, GMR1/2, etc.
- High Performance Computing (HPC)
  - Building a generic platform, HW/SW co-design
  - Cryptanalysis, financial analysis, etc.
- In-depth analysis of communication protocols
- Hostile network detectors for GSM networks
- Search and Rescue systems
  - SAR seekers (mobile phone locator and communicator for airborne, seaborne and land based search and rescue)

# Cooperation of Cepia with FI

- Internships
  - Generating/verifying of new ideas
  - Basic prototyping (done in secure environment)
- Theses
  - Topics interesting in longer time perspective
- Competitions
  - Important for identifying talented students/co-workers
- Lecturing
  - Individual lectures, projects related to education in crypto field...

# Why work for Cepia?

- Bleeding edge research and development in cryptology, information security, data mining and signal/protocol processing
- Ensuring employees have time to keep up to date in their field of expertise
- Very high education level among colleagues
- Work in international teams
- Competitive salaries

# Who are we looking for?



- Ability to think out-side 'the box' & to consume new ideas quickly
- Selected opened positions
  - C/C++ programming
  - VHDL, GPU and DSP algorithms design and programming
  - Reverse engineering/obfuscation



**Internships and student projects**

Thank you for your attention