



Deadline	31.08.2019
Institution	Institute of Computer Science, Polish Academy of Sciences
Research Group	Cryptography
Project Title	<i>ComCrypt</i> – Efficient and Secure Algorithms for Joint Compression and Encryption
Funding Body	National Science Centre
Contact	Józef Pieprzyk josef.pieprzyk@csiro.au

Employment Conditions

- * Position is full time, initially for 6 months with a possible extension to 18 months and available as soon as possible.
- * Salary is PLN 8,375 per month (gross).

Essential Criteria

- * PhD degree in Computer Science or Mathematics (or in closely related field). The candidate should hold their PhD for no longer than 7 years (excluding maternity, parenthood and guardian leaves) or in other words, their PhD should be completed in or after 2012 in case there is no leave.
- * Solid background in Mathematics and Computer Science.
- * Excellent research track record confirmed by publications in quality conference proceedings and/or journals.
- * Excellent programming skills.
- * Good English language skills (in writing, reading and speaking).

Desired Criteria

- * Knowledge of Cryptography and Coding Theory with an emphasis on compression coding.
- * Experience with mathematics software such as Maple, Magma and Matlab.

Job Description

- * Development of theoretical underpinnings of joint compression and encryption.
- * Analysis of efficiency and complexity of ANS compression algorithms.
- * Design of ComCrypt algorithms for different levels of security.
- * Cryptographic analysis of ComCrypt algorithms (algebraic, linear and differential).

Application Procedure

- * The following documents are required:
 - cover letter with the following statement: “*I give my consent to the Institute of Computer Science, Polish Academy of Sciences, for processing my personal data that are necessary for recruitment purposes*”,
 - copy of PhD degree certificate,
 - curriculum vita (CV), which provides information about your research activities, participation in research projects, academic visits/seminars and awards,
 - publication list.
- * The documents are to be sent via email to josef.pieprzyk@csiro.au by the deadline. The preferred format is pdf.
- * Shortlisted candidates will be interviewed (using either Skype or Zoom).
- * Final decision is expected to be made soon after the interviews.