

# CURRICULUM VITAE

## PERSONAL DETAILS

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Name: Róbert Pethes  
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## PROFESSIONAL EXPERIENCES

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September 2015 - **PHD STUDENT AT ÓBUDA UNIVERSITY**

September 2013 -  
February 2016 **HAND-IN-SCAN LTD.**

Image processing and machine learning in embedded environment (C++, Qt, OpenCV):

- Hand segmentation
- Build colour model
- Hand washing evaluation using machine learning algorithms
- Build shape model (active shape model)
- Motion compensation

June 2012-  
August 2013 **NNG LTD.**

- Design and implementation of the NNG white box test framework (in Python)
- Car sensor simulation (in Python)
- Randomized event tester (in Python)

April 2010 –  
May 2012 **MTA-SZTAKI DATA MINING AND WEB SEARCH GROUP**

Data mining, information retrieval and distributed data processing tasks in C++, Java and Python:

- Implementation of several moduls in SZTAKI Search Engine (ranking algorithms, refactoring)
- Distributed indexing and searching task using Hadoop, Hbase and Katta
- Graph visualization
- Natural language processing and information retrieval tasks

2009 - 2010 **3DHISTECH LTD**  
several C++ programming tasks

2007 - 2008

**COLLEGIUM BUDAPEST**

I was a member of ENGA development team. (ENGA - Evolutionary Neurogenetic Framework: a software aimed to simulate evolution of neural networks) Main tasks:

- Process the results of simulations and overview visualization
- ENGA core developments (C++)
- Develop a C++ multi-threading package to hide the platform dependent threading libraries.

2002 – 2007

**CADLINE LTD., Budapest**

Design and implementation of several sub-modules of an architectural CAD solution in C++

**EDUCATION**

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- 2015 – : Phd student at Óbuda University
- 2007 - 2011: Szeged University, Bachelor of Mathematics (Correspondence course)
- 2003 - 2006: Szeged University, Faculty of Science, M.S. in Computer Science (Correspondence course)
- 1999 - 2002: Budapest Polytechnic, John von Neumann Faculty of Informatics BSc in Information Technology

**TEACHING ACTIVITY**

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- Lecturer at Óbuda University at the spring semester of 2015/2016 academic year: Fourier analysis and function series (In English and in Hungarian)
- Lecturer at Óbuda University at the autumn semester of 2016/2017 academic year: Queueing systems (In English and in Hungarian)

**LANGUAGE:** English - Intermediate level

Budapest, September 12. 2016

Róbert Pethes