

Education

Master of Science: Computer Science, *High Performance Computing* Fall 2014 – **Expected:** Dec 2015

Georgia Institute of Technology - Atlanta, GA, United States **GPA:** 4.0

- Coursework: Computability, Complexity & Algorithms, Computational Complexity, Computer Graphics, Computer Animation
- In progress: HPC, Advanced OS, High Performance Computer Architecture, Compiler Design

Bachelor of Science: Computer Engineering

Fall 2010 – Jan 2015

Budapest University of Technology and Economics - Budapest, Hungary

GPA: 3.0

Experience

AXA Bank Europe – Budapest, Hungary

Jul 2013 – Aug 2013

IT Tester Intern

- Carried out Functional and Penetration Testing on Internet Bank and Call Center applications.
- Performed and documented over 600 detailed test cases in a group of 4 using Chrome Debugger, MSSQL and SpiraTest.
- Aided in the discovery and the patching of 2 critical security holes in the live Internet Bank system.

Skills

Programming Languages: C++, C, C#, Java, Python, MSSQL, Oracle SQL, Prolog, Erlang, HTML5, Javascript

Technologies/Libraries: OpenGL, OpenCL, Boost, Dropbox API, OneDrive API, .NET 4.5

Tools: Visual Studio, Clang, SVN, GitHub, Linux, Windows, Regex

Projects

<https://github.com/duyhai>

An action puzzle game in C++ using SFML

side project

- Implemented procedural map generation using cellular automata method
- Built tile based map data structure to allow optimization of collision detection

A flashcard program in C#

side project

- Integrated cloud syncing (Dropbox API, OneDrive API) and PDF exportation for e-books and printability
- Implemented XML persistence of decks and base64 storage of images

A Multiplayer Tower Defense game in HTML5

BSc Thesis Project

- Implemented networking using the Lockstep model. Achieved complete determinism among player clients
- Built a matchmaking server in C# using SignalR. Players of any platforms could play against each other without issues
- Solved performance of mobile and weaker PC users by providing raster images beside the default vector images
- Modified the Endgate game framework to support touch controls

An inventory and sale register application in C# using WPF

BSc New Gen. .NET course

- Designed and generated code-first database using EF 6.0. Connected clients to DB server using WCF
- Implemented flexible, dynamic localization for the interface