

## Objective

Looking for a Summer 2015 internship. I am interested in all industries, positions and opportunities.

## Education

**Master of Science:** Computer Science, *High Performance Computing* Fall 2014 – **Expected:** Dec 2015  
**Georgia Institute of Technology** - Atlanta, GA, United States **GPA:** 4.0/4.0

- Relevant Coursework: Computability, Complexity & Algorithms, Computational Complexity
  - 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:** 4.0/5.0

- Relevant Coursework: GPGPU, New Generation .NET, Operating Systems, Computer Architecture, Computer Networks, Databases, Linear Algebra, Data structures & algorithms, Graph Theory, Probability Theory

## 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.
- Aided in the discovery and the patching of 2 critical security holes in the live Internet Bank system.

## Leadership

**Summer Camp Organizer, Szent Istvan High School** – Budapest, Hungary 2010 - 2014

- Organized week long summer camps of 120+ people with a team of 15.

## Skills

**Programming Languages:** C++, C, C#, Java, Python, Powershell, MSSQL, Oracle SQL, Prolog, Erlang, HTML5, Javascript  
**Technologies/Libraries:** OpenGL, OpenCL, SFML, Boost, Unreal Engine 4.0, Dropbox API, OneDrive API, .NET 4.5  
**Tools:** Visual Studio, Clang, SVN, GitHub, Linux, Windows, Regex

## Projects

<https://github.com/duyhai>

**Shady Adventure**, an action puzzle game in C++ using SFML side project

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

**FlashCardsX**, a flashcard program in C# side project

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

**Storm, Earth & Fire**, a Multiplayer Tower Defense game in HTML5, using SignalR and Endgate BSc Thesis Project

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

**Store Manager**, an inventory and sale register application in C# using WPF BSc NewGen .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