

## 301 10th St NW Apt 617A, Atlanta, Georgia 30318-5613 | +1(404)200-6373 | duyhai@gatech.edu

# **Objective**

Looking for a Summer 2015 internship. I am interested in all software development positions and opportunities.

### Education

Master of Science: Computer Science, High Performance Computing

Georgia Institute of Technology - Atlanta, GA, United States

Fall 2014 – **Expected**: Dec 2015 **GPA**: 4.0/4.0

- Relevant Coursework: Computability, Complexity & Algorithms, Computational Complexity
- o 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 <a href="https://github.com/duyhai">https://github.com/duyhai</a>

**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

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

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

**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 the performance issues of mobile and weaker PC users by providing raster images beside the default vector images
- Modified the Endgate game framework to support touch controls

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