

# DUY HAI BUI

<https://www.linkedin.com/in/duyhai>

950 Marietta Street NW, Apt 4219, Atlanta, Georgia 30318 | +1(404)200-6373 | duyhai@gatech.edu

## Objective

Seeking a full-time C++ Software Developer position involving GPGPU and/or Distributed Computing.

## Education

**Master of Science:** Computer Science, *High Performance Computing* Fall 2014 – **Expected:** Dec 2015  
**Georgia Institute of Technology** - Atlanta, GA, United States **GPA:** 3.6

- Relevant Coursework: Computer Graphics, Computer Animation, HPC, Advanced OS, High Performance Computer Architecture, Compiler Design
  - In progress: Distributed Computing

**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.

## Projects

<https://github.com/duyhai>

Scientific programming in Python Side Project

- Designed and implemented a method for quantifying path integration in lab mice
- Assisted in the refactoring of a research lab's program code for data analysis, achieving 4x speedup

Sequence motif finder in C++ using OpenMPI (team of 2) MSc HPC Project

- Developed a parallel program for finding sequences within a given Hamming distance of a list of sequences using the master-worker paradigm
- Implemented overlapping communication and computation for better performance.

Recoverable Virtual Memory in C++ (team of 2) MSc Advanced OS Project

- Designed and implemented the persistence of virtual memory using redo and undo logs
- Minimized backup time by only persisting diffs for given memory segments

## Achievements

- Placed 34<sup>th</sup> place out of 3000+ contestant in the Cisco Software Challenge Apr 2015
- Achieved a contest rating of 3139 (top 0.5% out of ~31000 users) on HackerRank. Jul 2015
  - <https://www.hackerrank.com/duyhai>