Oana-Georgiana Niculăescu

Curriculum Vitae

Principala Street
No 266, Razvad, Dambovita, 137395
+40 727 84 01 00
oana.niculaescu@gmail.com

Education

Oct 2010 - present: **Bachelor's degree in Computer Science**, *Faculty of Automatic Control and Computer Science, Politehnica Univesity of Bucharest*, Bucharest, Romania.

Sept 2006 - Jun 2010: **High School Diploma**, *"Constantin Carabella" National College*, Tirgoviste, Romania.
Computer Science and Mathematics Major

Projects and Professional Experience

June 2013 - Present: **ADVAHOO Business Solutions**, *Part-time Software Developer*.
Java and JavaScript

Summer 2013, small contribution: **Gerbil - open source software**, *small contributions*.
Implemented the image differencing module for the software, the module employs different distance measuring algorithms

Aug 2012 - Oct 2012: **ESA Summer of Code**, *BRLCAD Project*.
Bullet Integration - Physics Application

Jun 2012 - Aug 2012: **SC Revo Solutions SRL**.
Junior Software Intern

Jun 2012 - Aug 2012: **3dUPB - 3dXP**, *GPGPU Team*, Student Developer.
Client-Server Model CUDA Collision Detection

Small Projects

OpenMP - Threading communicating using OpenMP: **Solving the problem of the colonists who need to decide what they will produce in a year using parallelism and OpenMP**, *Colonist are living on a matrix-like land and they can produce 2 kind of goods, A and B, they need to decide what kind of goods they will produce that year so that they will get a maximum profit*.

MapReduce - Sorting documents by relevance: **We are given some key words, we need to look them up inside all the documents and then sort the documents by relevance, the most relevant document is that one in which all the key words appear more times than a number n**.

OpenGL - Rubik cube: **Implementing a Rubik cube in 3D using OpenGL and C++**.

Linux Minishell: **Implementing a minishell in the linux user space that will emulate the bash shell commands and actions**.

Linux - MPI library implementation: **Implementing a dynamic library in the linux user space that will emulate the basic functionality of the MPI library**.

TV Channel Rendering Preview - Cell Arhitecture
: **Given 16 TV streams of 624x380px images we need to render a final stream composed of those 16 images, with 624x380px dimensions using the Cell Arhitecture**.

Blas dsymv function optimizations
: **Using the Blas function library there must be made a comparison between a hand implemented version of the dsymv function, with compiler and different arhitecture optimizations and the native Blas function**.

Swap and demand pager for the unix system
: **A dynamic shared library that allows allocating multiple virtual memory areas where page faults, demand paging operations, swap in and swap out operations would be simulated**.

Thread scheduler for the unix system
: **Implementing a thread scheduler that will control the execution of threads in the user-space. The scheduler will simulate a preemptive process, in a uni-processor system that will use a Round-Robin scheduling model**.

Computer skills

Programming Languages
: Good knowledge: C, Java, Networking
Medium knowledge: C++, JavaScript, Operating Systems Programming knowledge, Network Protocols, Cisco IOS
Beginner: Python, Bash, Oracle

Operating Systems
: Linux

Versioning
: Git - https://github.com/elf11

Languages

Romanian
: **Native**

English
: **Fluent**

Interests and Hobbies

- Operating Systems
- Computer Graphics
- Networking, Computer Networks
- Distributed Systems
- Parallel Processing
- Network Protocols
- UI/UX