

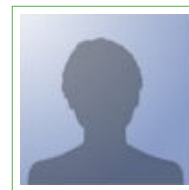
Viviana Petrescu

Curriculum Vitae

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*Creative team player. Passionate about **data mining/machine learning, algorithms, data structures, object oriented programming.***

Education

- 09/2014 to date **Ecole Polytechnique Federale de Lausanne, Switzerland, GPA: 5.5/6.**
Phd Fellowship. Worked on speeding up Convolutional Neural Networks using separable filters and on predicting molecular properties using machine learning techniques. Libraries used: Theano (Python) and Torch (Lua). Courses taken: Pattern Classification and Machine Learning, BigData
- 09/2009 - 01/2012 **Eidgenossische Technische Hochschule, Zurich, Switzerland, GPA: 5.45/6.**
Master Degree in Computer Science - with focus on Visual Computing and Machine Learning
- 09/2006 - 06/2009 **Jacobs University Bremen, Germany, GPA: 1.53 on a scale 5-1.**
Bachelor Degree in Computer Science.
- 09/2002 - 07/2006 **"Carol I" National College, Craiova, Romania, GPA: 9.83/10.**
Secondary education. Graduated in advanced Mathematics and Computer Science.

Industry Experience

- 04/2012 - 08/2014 **Scandit / ETH, Zurich, Switzerland.**
C++ Software Engineer R&D. Worked on real time computer vision algorithms for a leading barcode scanner SDK for iOS and Android. Added support for new barcode formats and improved existing image processing pipeline in order to better recognize barcodes in blurry images.
- 10/2011 - 02/2012 **Nebion, Zurich, Switzerland.**
Java Software Engineer intern. Nebion provides a powerful search engine that integrates and instantly mines thousands of curated biological datasets. Optimized and implemented a new biclustering algorithm in Java - NP-complete problem
- 06/2010-09/2010 **Disney Research Lab, Zurich, Switzerland.**
C++ Software Engineer intern. Implemented from scratch a user interface for controlling the LEDs of a dome using C++ and Qt. The colors of the LEDs were controlled either by XML configured files or by wrapping the colors of an image onto the dome's shape.
- 10/2009-01/2010 **Disney Research Lab, Zurich, Switzerland.**
C++ Software Engineer, part-time employment. Porting to C++ the Matlab implementation of the Conjugate Gradient algorithm for stereo vision - the process of extracting 3D information from multiple 2D views of a scene.
- 07/2009-09/2009 **Department of Geoinformatics, University der Bundeswehr, Munchen, Germany.**
C++ Software engineer intern. Developed a tool for visualising the underground pipes of the city in 3D-PDF using C++ and the library PDF3D-SDK.
- 06/2008-09-2008 **Google, Trondheim, Norway.**
C++ Software engineer intern. Built a tool for visualizing data flow in MapReduce jobs. Relevant information was extracted from logs and the flow was represented as directed graphs using GraphViz. The project aimed at discovering highly active cells for a better utilization of resources.

Teaching Experience

- 09/2007-05/2009 **Department of Computer Science, EPFL, Lausanne, Switzerland.**
Student Assistant for Probability and Statistics. Tasks included grading exams and supporting students during lab sessions.
- 09/2007-05/2009 **Department of Computer Science, ETH, Zurich, Switzerland.**
Student Assistant for Informatics II D-MAVT and Discrete Mathematics courses. Tasks included grading weekly assignments and holding tutorials.
- 09/2007-05/2009 **Department of Computer Science and Mathematics, Jacobs University Bremen, Bremen, Germany.**
Teaching Assistant for C++ Object Oriented Programming lab and Algorithms and Data Structures lab, "Single Variable Calculus", "Linear Algebra, Probability, Statistics". Tasks included grading weekly assignments and supporting students during lab sessions.

Research and Project Experience

- 03/2011 - 10/2011 **Master thesis, ETH Zurich, Switzerland.**
Worked on a weakly supervised object recognition task on improving the memory and time complexity of LocLearn (algorithm for simultaneous localizing and learning an object class) - supervisor Prof. Dr. Vittorio Ferrari. (Can be found at <http://e-collection.library.ethz.ch/eserv/eth:4671/eth-4671-01.pdf>)
- 02/2009 - 05/2009 **Guided research, Jacobs University, Bremen, Germany.**
Guided research in improving single-word recognition using auxiliary trained feedback in Echo State Networks - supervisor Prof. Dr. Herbert Jaeger. (Can be found at <https://svn.eecs.jacobs-university.de/svn/eecs/archive/bsc-2009/vpetrescu.pdf>)
- 09/2010 - 12/2010 **Modelling the performance of a system, Advanced Systems Lab, ETH Zurich.**
Worked in a team with Davide Arrigo and Darko Makreshanski. We developed and tested the stability and performance of a Java system consisting of multiple clients, middlewares and postgresql database servers, following the TPC-H specification.

Languages

Romanian	English	German	French
mother tongue	proficient	A2 - European level	A2 - European level

Programming skills

Using a scale of beginner, intermediate, advanced and expert I rate my knowledge of:

Programming **Good: C++, Matlab Intermediate: Java, Python, Postgresql.**

Frameworks **Beginner: Torch (deep learning library), Spark, Hadoop.**

Tools **vim, Eclipse, Git, GitHub**

Skills and Achievements

Publications B.Alexe, V.Petrescu and V.Ferrari, "Exploiting spatial overlap to efficiently compute appearance distances between image windows", Neural Information Processing Systems 2011

- Workshops/Further education
- Product design workshop at Google office Zurich
 - Trainer for Intercultural and Transition Management Workshop, Jacobs University Bremen, Germany - prepared freshmen for coping with a multicultural environment.
 - Didactic training certification at ETH Zurich, Switzerland 2011
 - Successfully completed 100/100 the online non-credit Machine Learning course offered by prof. Andrew Ng from Stanford University, 2013

- Awards**
- EMEA Anita Borg finalist 2010.
 - Member of the President's list for high academic achievement in 2008/2009 at Jacobs University Bremen.
 - Mention(bronze medal) at the National Olympiad of Mathematics in Romania from 2001 to 2004. Various prizes at mathemaical competitions (more than 10) across Romania in 2002-2006

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January 01, 1984

Company Recruitment team

Company, Inc.
123 somestreet
some city

Dear Sir or Madam,

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis ullamcorper neque sit amet lectus facilisis sed luctus nisl iaculis. Vivamus at neque arcu, sed tempor quam. Curabitur pharetra tincidunt tincidunt. Morbi volutpat feugiat mauris, quis tempor neque vehicula volutpat. Duis tristique justo vel massa fermentum accumsan. Mauris ante elit, feugiat vestibulum tempor eget, eleifend ac ipsum. Donec scelerisque lobortis ipsum eu vestibulum. Pellentesque vel massa at felis accumsan rhoncus.

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Albert Einstein discovered that $e = mc^2$ in 1905.

$$e = \lim_{n \rightarrow \infty} \left(1 + \frac{1}{n}\right)^n$$

Yours faithfully,

Viviana Petrescu

Attached: curriculum vitae