

Victor Alexandru Darvariu

Junior Software Engineer & Data Scientist

✉ victor.darvariu@gmail.com

🌐 <https://victor.darvariu.me>

🌱 VictorDarvariu

I am a final year computer science student, with good analytical skills and an award-winning academic record. My interests are applied machine learning, algorithmic problem solving, and the practice of building maintainable and extensible software systems – cemented by extensive experience in both an industrial and academic setting.

Education

University of Birmingham

MSci Computer Science with Industrial Year

2013 – 2018

Expected First Class Honours (13-14: **84%** Year Mark, 14-15: **85%**, 15-16: **88%**, 16-17: **100%**)

- **Notable modules:** Java Team Project, Intelligent Data Analysis, Machine Learning, Neural Computation, Statistics, Artificial Intelligence, Functional Programming, Enterprise Systems, Software Systems Components, Software Engineering, Operating Systems, Networks, Computer Security
- **Awards:** “Best First Year”, “Best Second Year MSci Student” prizes awarded for academic performance
- **Extracurricular activities:** various tutoring experience, administrating website of University’s racing club

Mihai Eminescu National College, Botosani, Romania

Mathematics and Computer Science

2009 – 2013

Romanian “Diploma de Bacalaureat” (A Levels Equivalent) : 9.56/10

Work Experience

- **Functional Programming Demonstrator, Computer Science Department, University of Birmingham**
September 2017 – Present
 - Assisting second year students in practical sessions with functional programming techniques, algorithmic thinking, and problem-solving
- **Visiting Researcher, Department of Geography, University College London**
September 2017 – Present
 - Continuing work completed during my Research Assistant position
 - Analysing the data generated as part of the study using deep learning and data science techniques, and summarizing findings in a pending research publication
- **Research Assistant, Department of Geography, University College London**
June 2017 – September 2017
 - Designed a study with the aim of finding the link between the environment of individuals and their mood levels, based on user-submitted questionnaires, and mobile sensing data
 - Completed a comprehensive Android application for study participants to use, that lets them record their mood and visualize it over time, sense contextual data (location, activity) and transmit to data collection infrastructure
- **Software Engineer, Technology & Information Risk, Morgan Stanley**
June 2016 – June 2017
 - Worked on projects experimenting with new technologies in the information security division of a leading investment bank
 - Gained valuable commercial experience, working alongside experienced technologists, and learning enterprise software development and architectural patterns
 - **Project 1:** Architected and built a contextual authentication system, consisting of: AngularJS front-end, RESTful Java middle tier, SQL data store, and machine learning based Python computational engine. Enabled detection of anomalies in client logins, configuration of rules, and visualization tools.

- **Project 2:** Experimented with the FIDO U2F protocol; built a service to expose the protocol, and integrated it with existing infrastructure - bringing frictionless second factor authentication to client-facing systems.
- **Web Developer, Careers Network, University of Birmingham**
May 2015 – May 2016
 - Saved hundreds of man-hours by automating content migration / review with Python scripts
 - Built user surveys, analyzed data and developed web-based learning resources for students
- **Intern, Data Science Lab, Computer Science Department, University of Birmingham**
July 2014 – September 2014
 - Contributed to a project exploring authorship networks, learning data science tools and techniques
 - Worked on, documented and deployed a web application using LAMP stack and Python modules

Key Technical Skills

- Data science & machine learning - intermediate
 - Good handle of core Python & data science packages: pandas, scikit-learn, NumPy, SciPy, matplotlib
 - Solid background knowledge of algorithms, techniques & practical implementation concerns
- Java enterprise development: Core Java, Spring, Apache CXF, Jetty, Hibernate - intermediate
- Android native app development - intermediate
- Web technologies
 - HTML/CSS/JavaScript+AngularJS - intermediate
 - Angular2, TypeScript, and node.js - basic
- Other programming languages: prior exposure to C++, C, Haskell, OCaml, Scala, Matlab/GNU Octave
- Database systems: SQL - intermediate, MongoDB - basic
- Software development practices: refactoring, object-oriented design, TDD, BDD, version control with git
- Good understanding & exposure to Unix/Linux fundamentals; basic shell scripting

Interests & Achievements

- “Personal Skills Award” - awarded in June 2015 by the University of Birmingham, as formal recognition for extra-curricular activities
- Interested in algorithmic problem solving and competitive programming: won 3rd place ACM UKIEPC 2015 at University of Nottingham; solved 50+ algorithmic problems on UVa Online Judge
- Completed several MOOCs relating to data science and machine learning: Machine Learning, Elements of Statistical Learning, Mining Massive Datasets - Stanford University, Neural Networks – University of Toronto on Coursera
- I contribute to the *socialgorithm* open source organization, building platforms for algorithmic competitions
- Semi-finalist of the IBM Universities Business Challenge 2014

Languages

- English, Romanian – native level proficiency (C2)
- French – limited working proficiency (B2)
- German, Spanish – basic proficiency (A1)

About Me

I have a general interest in the arts, having acted in a theatre group for about two years, which helped me develop communication and collaboration abilities. I enjoy cinematography, reading novels and studying foreign languages in my spare time. I am also a very active person – I lift weights and go running when I get the chance.