# Michael Sjöberg

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GitHub github.com/michaelsjoeberg

#### Education

The Open University Business School 2020–(2022) Milton Keynes, United Kingdom

Master of Science in Finance

 $\mbox{\bf King's College London}, \mbox{ London}, \mbox{ United } \quad 2019–2020 \mbox{ Kingdom}$ 

Master of Science in Advanced Computing

Thesis title: "A Standard Pascal Compiler Targeting WebAssembly"

Thesis supervisor: Dr. Christian Urban

Classification: Pass with Merit

Selected coursework: Computer vision; Agents and multiagent systems; Nature inspired learning algorithms; Pattern recognition, neural networks, and deep learning; Security Engineering

- Developed MDP-solver to play and win stochastic games (Pacman with random movements and ghosts)
- Designed and trained different types of deep neural networks
- Implemented various machine learning algorithms

**The Open University**, Milton Keynes, 2014–2018 United Kingdom

Bachelor of Science with Honours in Computing and Information Technology

Main fields of study: Computer Science, Mathematics Honors: Upper Second-class (equiv. GPA 3.33–3.67) Selected coursework: Algorithms, data structures and computability; Web, mobile and cloud technologies; Software engineering; Mathematical methods

 Designed and developed web application to modify financial spreadsheet documents

**Stockholm University**, Stockholm, Sweden 2013–2014 Main fields of study: Mathematics, Evolutionary Biology

**Karlstad University**, Karlstad, Sweden 2012–2013 Main fields of study: Natural Sciences

### Selected Experience

#### michaelsjoeberg.com

2010-

Research and develoment on personal projects, notes on investing, computational problem solving, general software development

- EvertAI Proprietary deployment and hosting platform for knowledge databases (automated reasoning applications)
- Open Terminal Desktop-based application for quick access to financial data
- EQZEN (beta) Proprietary web-based platform to manage multiple stock portfolios
- LearnHub.io Web-based platform and skill tracker for self-learners

#### **Technical Skills**

#### Software Engineering

- Generalist software developer and work comfortably in multiple programming languages; proficient in Python and Rust; familiar-to-intermediate in Ruby, Java, and C: and beginner in Scala and Lua
- Completed postgraduate-level coursework in systems programming and application security, primarily working in C and x86 Assembly; experience with implementing compilers
- Experience with implementing software solutions from idea stage, including high-level design choices, software architecture, and data management
- Familiar with most software engineering concepts and methodologies, development environments, operating systems, and related tools, including Linux (and other UNIX-like systems), Bash, and Git

#### Web Development

- Considerable experience with full-stack web development and have built web-based applications for 10+ years
- Familiar and work comfortably with almost anything related to web development, including HTML/CSS, JavaScript, jQuery, Vue, PHP, Flask (Python), Ruby on Rails, Sass, MySQL, and MongoDB

 Experience with several cloud computing platforms, including Amazon Web Services, Heroku, and Cloudera

#### Artificial Intelligence/ Machine Learning

- Completed postgraduate-level coursework with distinction in AI/ML-related topics, such as automated reasoning, intelligent agents, evolutionary algorithms, reinforcement learning, and neural networks
- Familiar with logic-based programming languages, such as Prolog, and have experience with several software tools, including NetLogo, Keras, TensorFlow, Torch, and various Python libraries, such as Mesa and scikit-learn

#### Computational Science

- Completed undergraduate-level coursework with distinction in multivariable and differential calculus; postgraduate-level coursework in network theory and mathematical optimization
- Proficient at building mathematical models and have worked with very large real-world datasets using Apache Spark, Apache Hadoop, MapReduce, and various Python libraries, such as NumPy, Pandas, and matplotlib
- Familiar with computing environments, including MATLAB and Wolfram Mathematica; proficient with common presentation tools, such as LaTeX, Jupyter Notebook, and Microsoft Office (in particular Excel)

#### Other Experience

## Holans (Holans Sweden Trading 2014-Partnership)

Partner

• Designed and developed nutrition supplement product (for sale in Sweden and Norway)

Give Trees (Plant for Earth Co. Ltd) 2014–2017 Co-founder, CEO

Developed mobile-based applications and games targeting charitable donations (Android and iOS, both discontinued)

# Swedish Armed Forces (1st Marine 2009–2010 Regiment), Berga, Sweden

Basic military training (11 months)

 Leadership and teamwork training in extreme environments; first aid, first responder, and survival training (both general and cold climate) Technical education and practical experience with advanced weapons and explosive systems

#### Other Skills

- Fluent in Swedish (native) and English (professional);
  conversational in Norwegian; limited in Spanish and German
- Proficient at building financial models based on publicly available data; familiar with securities and different valuation strategies
- Familiar with modern design tools, such as Adobe Photoshop, and building design in Autodesk Revit

Keywords: Python, Rust, Ruby, Java, C, Scala, Lua, Linux, UNIX, Bash, Git, HTML/CSS, JavaScript, jQuery, Vue, PHP, Flask, Ruby on Rails, Sass, MySQL, MongoDB, Amazon Web Services, Heroku, Cloudera, Apache Spark, Apache Hadoop, MapReduce, NumPy, Pandas, matplotlib, MATLAB, Wolfram Mathematica, LaTeX, Jupyter Notebook, Microsoft Office, Excel, Prolog, Keras, TensorFlow, Torch, Mesa, scikit-learn, Adobe Photoshop, Autodesk Revit