Curriculum Vitae – Mr. Arash Shahsavari

Mobile Phone	+46 70 712 63 22
Email	arash8579@hotmail.com
Web	, , webpage

Education

2016 - 2019 Gothenburg, Sweden
M.S. in Complex Adaptive Systems - Chalmers University of Technology
Thesis: *An Evaluation of Multi-Step Analyses of Single-Cell RNA Sequencing Data.*
Advisor: Rebecka Jörnsten.
Selected Coursework: Neural Networks, Stochastic Optimization, Information Theory, Dynamical Systems.

Fall 2017 Seoul, South Korea
Exchange Studies - Dongguk University
Selected Coursework: Multiple View Geometry, Deep Learning.

2013 - 2016 Lund, Sweden
Electrical Engineering - Lund University
Selected Coursework: Multivariable Calculus, Control Theory, Mathematical Statistics, Numerical Analysis.

Experience

2019- Cambridge, UK
Bioinformatician at University of Cambridge
- Long-term data science support for multiple biomedical projects (50+ datasets for 10+ different projects).
- Machine learning and statistics on terabyte-scale datasets.
- Involved in entire recruitment pipeline, from designing recruitment test, to selecting candidates for interviews, interviewing and final recruitment decisions.
- Teaching machine learning to PhD students and postdocs at Institute.
- Mentoring intern to contribute to open-source software and scientific publication.
- Co-authoring peer-reviewed scientific publications.

2018-2019 Gothenburg, Sweden
Volunteer at Kodcentrum
- Teaching coding to children from underprivileged areas.
- Planning and structuring classes, hands-on support to children and other volunteers.
- Long-term development of the learning platforms and curriculum.

Teaching and Mentorship

Teaching

- Developing training materials for single-cell data analysis course in Cambridge (2022).
- Intro to Machine Learning - Lecturing for PhD students and postdocs in Cambridge (2021).
- Teaching coding to children and developing teaching materials and curriculum at Kodcentrum (2018-2019).

Mentorship

- Andi Munteanu, UAIC Computer Science M.S. student and Cambridge bioinformatics intern. Guided him to contributing to open-source software and co-authoring scientific publication (2021).

For an updated version of this CV with hyperlinks, see sharash.github.io/resume.pdf

Skills and Development

- **Programming Environments:** Python (Optimization example),
  R (Clustering evaluation package, Random Forest feature selection example),
  Julia (Outlier detection example, Optimization example), MATLAB, C++, Bash, LaTeX, Arduino.
- **Computing Tools:** SLURM, git, Jupyter Notebook (Example), R Markdown (Example)
- **Software packages:** ClustAssess - developed from scratch, currently package maintainer Github, Example, Documentation
- **Scientific Publications:** 4 papers on biomedical data science.
- **Professional Courses:** Python for Bioimage Analysis - week-long course by the Royal Microscopical Society.
- **Self-Studied Books and Courses:** Intermediate Linear Algebra, Computational Linear Algebra, Real Analysis, Combinatorics & Graph Theory, Reinforcement Learning.
- **Webpage:** sharash.github.io

For an updated version of this CV with hyperlinks, see sharash.github.io/resume.pdf