

Arttu Modig

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EDUCATION

AALTO UNIVERSITY

M.Sc. (TECH.) IN BIOINFORMATION TECHNOLOGY

Oct 2016 | Espoo, Finland

Major: Computational and Cognitive Biosciences

Thesis: *A Metric for Human Motor Capacity*

B.Sc. IN BIOINFORMATION TECHNOLOGY

Nov 2015 | Espoo, Finland

MATRICULATION EXAM

Mikkelin Yhteiskoulun lukio | 2007 | Mikkeli, Finland

LINKS

Facebook:// [amodig](#)

Github:// [amodig](#)

LinkedIn:// [amodig](#)

Twitter:// [@ArttuModig](#)

BoardGameGeek:// [Dalar](#)

Goodreads:// [amodig](#)

RateYourMusic:// [Dalar](#)

SKILLS

DATA SCIENCE

Fields I love:

Data Analysis • Data Visualization
Bayesian Statistics • Machine Learning
Technologies I've used:

RDBMS • NoSQL • Big Data (Hadoop, Spark, Cloudera, HP Vertica)
Google Cloud (Analytics, BigQuery, Tag Manager)

Related things I've done:

A/B testing • CRM • KPI

PROGRAMMING

Working knowledge:

Python (OOP, SciPy, Pandas, Matplotlib, Jupyter) • R (tidyverse, ggplot2)
SQL • Matlab • Java • \LaTeX

Some experience:

HTML5 • CSS • JavaScript
Shell scripting • C • PHP
Scala • Stan • Processing

BUSINESS EXPERIENCE

VEIKKAUS | DATA SCIENTIST

Jan 2017 – Present | Helsinki, Finland

- Member of the Operational Analytics team in Digital Marketing, Sales and CR.
- Web analytics & optimization (A/B testing).
- KPI, Performance Attribution and CRM analysis, incl. reporting automation through dashboards.
- General data analysis, data exploration and machine learning.

RAY | DATA ANALYST & SOFTWARE DEVELOPER

Apr 2015 – Dec 2016 | Espoo, Finland

- Member of the Game Studio UX/UI team.
- Member of the Business Intelligence team.
- BI data mining, predictive modelling and reporting automation.
- Computational UX/UI personalization.
- In-game analytics and general data analysis, data exploration and machine learning.

RESEARCH EXPERIENCE

HELSINKI INSTITUTE OF INFORMATION TECHNOLOGY |

RESEARCH ASSISTANT

2011 – May 2015 | Helsinki, Finland

- Member of the Information, Complexity and Learning research group led by Assistant Prof. Teemu Roos (part of CoSCo).
- Applied information theory, machine learning and Bayesian statistics in the study of human motor capacity.
- Created software and services, e.g. a full LAMP stack service (in production) and a recommendation engine back-end service.

MAX PLANCK INSTITUTE FOR INFORMATICS | RESEARCH ASSISTANT

Jul 2012 – Sep 2012 | Saarbrücken, Germany

- Computational Human-Computer Interaction research by Ph.D. Antti Oulasvirta.

DEPARTMENT OF MICRO AND NANOSCIENCES, AALTO UNIVERSITY | RESEARCH ASSISTANT

2009 – 2011 | Espoo, Finland

- Member of the Photonics research group led by Prof. Seppo Honkanen. Extensive experience with laboratory setups and working in a clean room space with chemical handling.

PUBLICATIONS

- [1] A. Oulasvirta, T. Roos, A. Modig, and L. Leppänen. Information capacity of full-body movements. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, pages 1289–1298. ACM, 2013.
- [2] M. Sherman, G. Clark, Y. Yang, S. Sugrim, A. Modig, J. Lindqvist, A. Oulasvirta, and T. Roos. User-generated free-form gestures for authentication: Security and memorability. In *Proceedings of the 12th annual international conference on Mobile systems, applications, and services*, pages 176–189. ACM, 2014.