## SIA REZAEI

3827 Bayridge Ave., West Vancouver, BC, Canada, V7V 3J3 (C) +1 604 506 7525 | sia@siarez.com | GitHub | LinkedIn

## PROFESSIONAL SUMMARY

Software engineer with 6 years of experience and a focus on machine learning who strives for code craftsmanship. A systemizer with experience leading, planning & executing in young and growing companies.

### SKILLS

- Languages: C/C++, Python, Javascript, C#, PHP
- ML libs: Tensorflow, PyTorch, SciPy, NLTK, Matlab, R
- OS: Linux, Embedded Linux, OSX, Windows, WinCE 5
- ML: RNN, CNN, PGM, regression, clustering, PCA
- Fast image acquisition and processing with FPGA
- Math: Bayesian stat, graphical models, inferential stat
- Test driven development, documentation, API design
- Misc.: ZeroMQ, OpenCV, GIT, Jira
- Web: Node.js, Redis, AWS, AngularJs, HTML, CSS
- Electronics schematic and layout design

## **WORK HISTORY**

APR 2010-FEB 2017 - at intervals

Founder | Serene Audio Inc. | Vancouver BC

- Strategic planning for Serene Audio to achieve short to long-term goals
- Creation & maintenance of sereneaudio.com
- Design and production of loudspeaker DSP amplifiers
- Acoustics, mechanical design, and voicing
- Design and operation of manufacturing process for production of loudspeakers

#### APR 2014-MAR 2015

Data analyst/software engineer | Lazymeal | Vancouver BC

Developed and implemented comprehensive analytics tools and methods for:

- Gathering data and usage habits of customers to drive development of Lazymeal's targeted marketing.
- Data analysis to predict the ROI before signing new partners, resulting in 3x increase in revenue
- Directing the efforts of the sales team to increase LTV
- Developed a platform to create, manage, and analyze the performance of guerrilla marketing campaigns

#### SEP 2013-MAR 2014

Fullstack developer | Verlico Inc | Vancouver BC

Worked on frontend (Angular JS, HTML, CSS) and backend (Node JS, Express, Redis, Elastic Search) of Verlico.com, a fashion social networking platform. Also worked on deployment of the platform on AWS.

#### SFP 2010-MAY 2011

Engineer/Software architect | Hipparcos Tech. | Vancouver BC

- Developed a distributed computing software on embedded Linux in C and Python for a <u>cloud connected</u> <u>home robot</u>
- Updated Linux's display and touchscreen drivers for the embedded hardware used in this project
- The robot's hardware consisted of a BeagleBoard + Arduino on a chassis with 4 wheels, a stereo camera, ultrasound, infrared, and motion sensors.
- Firmware for 8-bit MCU control board
- Worked extensively with ZMQ, OpenCV, Clutter graphic library, and OpenGL.

#### MAY 2009-JAN 2010

Embedded software engineer | Serene Controls | Vancouver BC

- Developed software in C++ for an embedded, LAN connected, touchscreen media controller on Win CE 5.0
- Developed a lightweight graphics and physics engine from the ground up, in order to achieve good graphics performance (i.e. smooth animations) on a modest platform (ARM9 - 400MHz without a GPU)
- Updated touchscreen drivers for a smoother performance & better UX

## PROJECTS/HOBBIES

- Committer to <u>OpenMined/PySyft</u>, a homomorphically encrypted deep learning library
- <u>Duplicate question detector</u> for Quora Kaggle
- Uncertainty backpropagation (in progress)
- Soccer playing robots for the RoboCup competition
- Reading and implementing interesting AI papers

# EDUCATION + COURSES 2017

- Probabilistic Graphical Models Specialization by Daphne Koller (in-progress)
- Statistics with R specialization by M Rundel
- Bayesian Statistics course by Herbert Lee
- Machine Learning course by Andrew Ng
- Neural Networks course by Geoff Hinton

#### 2010

Bachelor of Applied Science in Systems Engineering Simon Fraser University, Vancouver, BC