Andrey Kurenkov

678-900-4326 · andreyvkurenkov@gmail.com · www.andreykurenkov.com

SUMMARY

CS graduate student with research and engineering experience, interested in machine learning and robotics.

Programming Languages: Python, Java, C, C++, MATLAB/Octave, LaTeX

Frameworks and Toolkits: ROS, Tensorflow, Sci-Kit Learn, Pandas, Orange, Django, Docker, Android

Embedded Development: Jetson TK1, TI C2000, PIC24, Arduino

EDUCATION

Stanford University, Stanford CA

September 2017 – Present

• M.S. in Computer Science with focus in AI and Real World Computing

• **GPA**: CS 3.8

Georgia Institute of Technology, Atlanta GA

August 2011 - May 2015

• **Dual major**: B.S. in Electrical Engineering, B.S. in Computer Science with Research Option

• **GPA**: CS 4.0 , Overall 3.88

GRE: quantitative 170/170 (98th percentile), verbal 168/170 (98th percentile), writing 5.0/6.0 (93rd percentile) **MOOC**: Udacity - Data Science Nanodegree, Coursera – Machine Learning, Programming Languages

EXPERIENCE - RESEARCH

Research Assistant, Stanford Vision Lab, Stanford CA

January 2017 - Present

Contributed to development and evaluation of novel Deep Learning CV research, part of effort to improve robot learning.

Submitted to NIPS and CORL as first author, currently pursuing novel research in Deep Learning for robotics.

Research Assistant, Socially Intelligent Machines Lab, Atlanta GA

August 2013 - May 2015

Assisted with and performed research at the Socially Intelligent Machines Lab with Curie, a humanoid robot

- **Published as lead author** ("An Evaluation of GUI and Kinesthetic Teaching Methods for Constrained-Keyframe Skills", IROS 2015); created ideas, wrote software, and ran a user study with a humanoid robot.
- Implemented ROS Java nodes for DMP, MoveIt, and marker usage. Improved C++ PCL object segmentation code.

Teaching Assistant, Georgia Institute of Technology, Atlanta GA

May 2012 – May 2015

Taught as a TA for Intro to OOP (Java) for 3 semesters, and then as TA and head TA for Intro to AI (Python) for 4 semesters

Summer Research Intern, *École Polytechnique Fédérale de Lausanne*, Lausanne Switzerland
Interned at the Microelectronic System Lab to model the lab's memristor technology using VerilogA

May 2014 – August 2014

- Developed simulations in ADE-L and Matlab to evaluate memristor applications in logic calculation and machine learning.
- Designed a novel CMOS circuit implementation of an abstract neuron model, and evaluated its performance with ADE-L.

Robotics Institute Summer Scholars Research Intern, *Carnegie Mellon University*, Pittsburgh PA June 2013 – August 2013 Interned at the Personal Robotics Lab with HERB, a humanoid robot, to incorporate past experience for better task execution

- Implemented a planning-based task execution framework with extensive data logging for smarter robot behavior.
- Researched, designed, and implemented a machine learning approach for error avoidance during task execution.

ORS Undergraduate Research, Georgia Institute of Technology, Atlanta GA

August 2012 – May 2013

EXPERIENCE - ENGINEERING

Software Engineer, *Oracle*, Santa Clara CA

June 2015 – July 2017

Worked on a small team to first prototype and then develop the first release of the Oracle Systems Manager for ZFSSA

- Contributed to a python microservice prototype using Docker, Flask, RabbitMQ, and Kafka.
- Lead design and implementation of REST and Logic layers of the product from start of project to beta release.

Agribot Senior Design Project, Team Lead

August 2014 - May 2015

- Integrated hardware components onto a Seeker Mobile Jr rover to create an autonomous farm mapping and spraying robot.
- Implemented and tested real time SLAM on a Jetson TK1 using the OmniMapper ROS service and multiple sensors.

GT Solar Racing Car Team, Software Lead, Electrical subteam member

August 2011 – May 2015

- Supervised and directed a group that developed high quality telemetry and control software with TI's C2000 Picollo chips.
- Collaborated with a partner on motor control software as well as others for electrical prototyping, testing, and debugging.

AWARDS

Georgia Tech's President's Undergraduate Research Award IEEE PES Scholarship Plus Recipient

Spring 2014, Fall 2014