SHRUTHI SUKUMAR

ECSL 1B19/1B21, Engineering Center, CU Boulder, CO-80301, USA shruthi.sukumar@colorado.edu

EDUCATION

Ph.D., Computer Science

University of Colorado, Boulder - Boulder, CO, USA

M.S., Electrical Engineering

University of Colorado, Boulder - Boulder, CO, USA

Thesis Title: Analysis And Solution Of Markov Decision Problems With A Continuous, Stochastic

State Component

Thesis Committee: Michael C. Mozer, Jason R. Marden, Behrouz Touri

B.E., Electronics and Communication Engineering

College of Engineering, Guindy, Anna University - Chennai, India

PROFESSIONAL EXPERIENCE

Data Modelling Engineer (Intern),

Answeron Inc. - Longmont, CO, USA

As the sole data modeller in operations team, I built and improved machine learning models to predict churn behaviour among subscribers and employees of clients. I was also tasked with migrating all the codebase from Matlab to Python.

RESEARCH EXPERIENCE

Graduate Research Assistant,

Neuromechanics Laboratory, P.I.: Alaa A. Ahmed, Ph.D.

Departments of Integrative Physiology and Mechanical Engineering

University of Colorado, Boulder - Boulder, CO, USA

Graduate Research Assistant,

Computational Modelling & Optimization Laboratory (Mozerlab),

P.I.: Michael C. Mozer, Ph.D.

Department of Computer Science and Institute of Cognitive Science

University of Colorado, Boulder - Boulder, CO, USA

Relevant Coursework

- Machine Learning
- Design and Analysis of Algorithms
- Dynamic Programming
- Deep Learning

- Probabilistic Modelling of AI
- Algorithmic Human-Robot Interaction
- Chaotic Dynamics (nonlinear dynamical systems)
- High Dimensional Dataset Analysis

June 2015 - July 2017

August 2017-Present

Graduated May 2017

Graduated May 2014

CGPA: 8.57/10.00

GPA: 4.00/4.00

GPA: 3.87/4.00

August 2017 - Present

January 2015 - May 2017

SKILLS

Languages: Python, Matlab, R, Javascript, C++ (prelimenary)

Other: Psiturk, Git, HTML, CSS, VHDL(hardware), LaTex, MS Office

PAPERS

- [1] Mozer, M. C., **Sukumar**, S., Elliott-Williams, C., Hakimi, S., & Ward, A. F. (2017). Overcoming temptation: Incentive design for intertemporal choice. In preparation. https://goo.gl/eYPpsj
- [2] Sukumar, S (2017). Analysis and solution of Markov decision problems with a continuous, stochastic state component. M.S. Thesis.
- [3] Sukumar, S (2019). Computational models of foraging behaviour in humans and other animals. Ph.D. Preliminary Examination Report.

POSTERS

Overcoming temptation: Incentive design for intertemporal choice [1],

Reinforcement Learning And Decision Making Conference, 2017

Ann Arbor, MI, USA

Should I stay or should I go: Vigor of arm reaching movements during foraging,

Rocky Mountain American Society of Biomechanics Annual Meeting, 2019

Estes Park, CO, USA

Effect of travel effort on movement vigor during foraging,

Reinforcement Learning And Decision Making Conference, 2019

Montreal, Quebec, Canada

AWARDS

CS Departmental Fellowship,

August 2017, Jan 2018

Department of Computer Science, University of Colorado, Boulder

Amount: \$5000

Early Career Professional Development Fellowship(ECPDF),

August 2017

Department of Computer Science, University of Colorado, Boulder

Amount: \$1200

RLDM Student Travel Fellowship,

June 2017

RLDM 2017 conference committee

Amount: \$250