

DIVYA SIVASANKARAN

Contact · div1090@gmail.com · +1(647) 324 9095
LinkedIn · GitHub · Personal Website

EXPERIENCE

FEB 2019 - JUN 2020, Toronto

MACHINE LEARNING SCIENTIST, INTEGRATE.AI

- Research and develop POCs for privacy preserving and ethical ML.
- Fair Machine Learning (FairML) - Led the initiative to develop the key technical and product capabilities to build a FairML product.
- Trusted Signals Exchange (TSE) - R&D domain adaptation and federated learning techniques to understand customer behaviour in a privacy preserving manner applied to marketing use-cases like offer optimization, customer churn, etc.

SEP 2017 - DEC 2018, Singapore

DATA SCIENTIST, CONEX SYSTEMS

- End-to-end management and development of projects
- Face Recognition for body-worn cameras - this was a collaborative effort with AETOS to help identify criminals from watch-lists using facial recognition.
- Predictive video analytics for healthcare - this was a collaborative research effort with Tan Tock Seng Hospital to prevent falls among high-fall-risk patients using thermal cameras.

AUG 2013 - JAN 2016, Singapore

RESEARCH ENGINEER, AUTODESK INC

- Research and develop POCs for 3D Reconstruction and Mesh Processing & End-to-End Software Development for product level features.
- Saved > 80% time for 3D Reconstruction, and improved quality of texture-unwrap by repurposing the segmentation algorithm for smarter data representation.

JUN 2012 - AUG 2013, Singapore

SOFTWARE ENGINEER, QUANTUM INVENTIONS

- Develop features to maintain data for real-time traffic information dissemination (data & server handling).
- Reconstructed reliable traffic flow from GPS Taxi probes using routing algorithms which improved the quality of road traffic data

AUG 2016 - DEC 2016, Singapore

PART-TIME TEACHING ASSISTANT, NATIONAL UNIVERSITY OF SINGAPORE

- NM3216 - Game design (Department of Communications & New Media)
- CS1231 - Discrete Mathematics (School of Computing)

JUN 2016 - AUG 2016, Singapore

GRADUATE STUDENT RESEARCHER, NATIONAL UNIVERSITY OF SINGAPORE

- Avatar based serious gaming for rehabilitation: Built an android game to help motivate senior patients with frozen arm rehabilitate and also provide weekly analytics for the physician.

EDUCATION

AUG 2017

MSC COMPUTER SCIENCE, NATIONAL UNIVERSITY OF SINGAPORE

- Second Upper (Hons) Classification (CAP - 4.33)
- **Specialization:** Algorithms and Theory
- **Thesis:** Context-aware continuous authentication using multi-modal biometrics. Built a context aware online-learning algorithm with theoretical guarantees for use in continuous authentication using Face, Voice and Gait as biometric input

JUN 2012

B.ENG IN COMPUTER ENGINEERING, NATIONAL UNIVERSITY OF SINGAPORE

- Second Upper (Hons) Classification (CAP - 4.0)
- **Thesis:** In collaboration Data Storage Institute (A*Star Group) on Visual Simultaneous Localization and Mobilization (VSLAM) for mobile robots

SKILLS

- **Languages:** Python, C/C++, Ruby, MATLAB, Java, LabView, Prolog
- **Platform & Tools:** PySpark, H/SQL, Android Programming, JavaScript, CSS, HTML, Unity 3D, GIT
- **Libraries & Packages:** Pytorch, Tensorflow, OpenCV, Caffe, Scikit-Learn, Keras, Boost, TBB, PCL, Qt

OTHER

Apr 2019 - Present

Part of an initiative to build a cancer diagnosis system with Cachar Cancer Hospital, India.

Publication

- Sivasankaran, D., Regab, M., Sim, T., & Zick, Y. Context-Aware Fusion for Continuous Biometric Authentication. International Conference on Biometrics (ICB), 2018.

Conference

- Strata Data Conference 2020 (Category: Ethics), FairML from theory to practice.
- Womxn in Data Science 2020, FairML - Theory to practice (Workshop)
- Autodesk Technical Summit 2015 (Category: Innovation), Real time 3D Segmentation.

Hackathon

- Second Prize at the Smart Living Hackathon 2018, Voice tech today for a better future tomorrow.
- Awarded Best Data Visualization team at FacebookX GIT Hack for a Cause 2016 (Girls in Tech).
- Winner of Autodesk Hackathon 2015 (Generate 3D models of houses from floorplans).

REFERENCE

Val Andrei Fajardo, Director of Machine Learning, integrate.ai,
E: andrei@integrate.ai, T: +1(226) 748 351

Dr. Terence Sim, Associate Professor & Assistant Dean of Corporate Relations, National University of Singapore, E: tsim@comp.nus.edu.sg, T: +65-65161180