

Sajaysurya Ganesh

☎ (+44) 74281 22941 | ✉ sajay.surya@gmail.com | 🏠 sajay.online | 📷 [sajaysurya](https://www.instagram.com/sajaysurya) | 🌐 [sajaysurya](https://www.linkedin.com/in/sajaysurya)

Education

University College London

London, United Kingdom

M.Sc. COMPUTATIONAL STATISTICS AND MACHINE LEARNING | DEAN'S LIST

Sep 2017 - Sep 2018

- Second highest overall degree average (87%). Learnt the fundamentals of machine learning techniques, specifically
 - Statistical modelling (with graphical models)
 - Supervised and unsupervised learning
 - Frequentist and bayesian (approximate) inference
 - Data visualization and model validation
- Second highest score (90%) in the Master's thesis. Explored the use of variational expectation-maximization algorithm in bayesian model-based reinforcement learning [[thesis](#)][[repo](#)]. Advised by [Prof. David Barber](#) and Yap Pau Ching.
- Worked on applications in computer vision like segmentation, camera calibration, depth estimation and object tracking.
- Worked on applications in natural language processing like dependency parsing and machine translation.
- Distinction (95%) in "Advanced Deep Learning and Reinforcement Learning" taught in collaboration with DeepMind.

Indian Institute of Technology Madras

Chennai, Tamil Nadu, India

SUMMER FELLOWSHIP PROGRAMME

May 2011 - Jul 2011

- Developed techniques to automate the design of sequential pneumatic circuits using evolutionary (genetic) algorithms. [[HIS-2011](#)][[FAIM-2017](#)]. Advised by [Prof. Saravana Kumar Gurunathan](#)

PSG College of Technology (Affiliated to Anna University Chennai)

Coimbatore, Tamil Nadu, India

B.E. PRODUCTION ENGINEERING | BEST OUTGOING STUDENT

Jul 2008 - May 2013

- Highest cumulative grade point average (9.74/10). All-India Rank 25 in Graduate Aptitude test in (Prod.) Engineering.
- Mastered the fundamentals of mechanical engineering, manufacturing techniques and factory automation.
- Partook in statistical process control and quality control activities at PSG Foundry. [[IFJ-2011](#)]
- Gained working knowledge in operating machine-tools and hand-tools as part of the 5-year sandwich programme.

Experience

Zoe Global Limited - joinzoe.com

London, United Kingdom

DATA SCIENTIST (FULL TIME)

Apr 2019 - present

- Contributed to the ongoing development of the flagship app aimed at personalized food recommendation.
- Improved and maintained the infrastructure that processes data from nutrition studies and food databases.
- Visualized data and tested hypotheses of scientific and business importance and collaborated with nutrition experts at King's College London and University of Nottingham to develop commercially viable product features.
- Analyzed sources of errors and fitted different machine learning models –primarily, hierarchical models using MCMC inference– for predicting biomarker levels in blood after consuming different types of foods.

The Alan Turing Institute

London, United Kingdom

INTERN

Jan 2019 - Mar 2019

- Contributed to the API design of [sktime](#): A machine learning toolbox for time-series data. [[MLSys Workshop: NIPS 2019](#)]
- Implemented the framework in python along with experts in time-series algorithms and maintained documentations.

Tata Technologies

Pune, Maharashtra, India

ENGINEER - DESIGN (FULL TIME)

Mar 2014 - Nov 2016

- Designed lifting fixtures, gantries, trolleys and fork-lifts for assembling the Rolls-Royce Trent series airplane engines.
- Wrote utilities in C++ & MFC to expedite designs and wrote macros in VBScript to automate CAD activities in CATIA.

Indian Institute of Technology Madras

Chennai, Tamil Nadu, India

PROJECT ASSOCIATE - DEPARTMENT OF ENGINEERING DESIGN (CONTRACT)

Jul 2013 - Oct 2013

- Explored the applicability of optimization algorithms in the synthesis of planar mechanical linkages.
- Wrote utilities to generate G-codes (CNC Programs) for 3D printing CAD models with anisotropic mechanical properties.

Skills

Programming Languages

python

C/C++, SQL, MATLAB, R

Python Packages

jax, tensorflow, numpy, pandas, scikit-learn

pytorch, pymc3, opencv

Languages

English, (Tamil) தமிழ்,

(Elementary Chinese) 汉语