



Shogun is an open-source machine learning platform that anyone can use to learn about ML and apply it to solve problems. Shogun provides efficient implementation of most standard ML algorithms, including state-of-the-art algorithms (among others: efficient SVM implementations, multiple kernel learning, kernel hypothesis testing and Krylov methods). All of these are supported by a collection of general purpose methods for evaluation, parameter tuning, preprocessing, serialisation and I/O.

Shogun does not re-invent the wheel, but offers bindings to other sophisticated libraries including, LibSVM/LibLinear, SVMlight, LibOCAS, libqp, VowpalWabbit, Tapkee, SLEP, GPML and more. A unified interface provides access via many popular programming languages, including C++, Python, Octave, R, Java, Lua, C#, and Ruby.

USE CASES

Shogun is used to teach Machine Learning course, e.g. at UCL London, at Polytechnique Paris.

Academic research in Machine Learning (50 citations in 2020)

Industry (appears in number of patents, used by predictive analytics companies)

PLANNED FEATURES

- + Finish Plugin architecture transition (instead of monolithic arch)
- + Run as WebAssembly/JavaScript
- + Graph based linear algebra and Automatic Differentiation

PROJECT NEEDS

Specialist manpower for
plugin/cmake architecture

200 hours | \$20,000

Developer advocate, to maintain and
facilitate onboarding of new devs

10-20 hours/week

Finish, deploy and
maintain new website

50 hours + 5 hours/month



For more information on Shogun,
including our governance structure
and project roadmap, please visit

<https://www.shogun-toolbox.org/>

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