



GRADUATE PROGRAM FOR
**REAL-WORLD DATA
CIRCULATION LEADERS**
PROGRAM FOR LEADING GRADUATE SCHOOLS
NAGOYA UNIVERSITY

Special Introduction Course on **Data Tools First**



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Special Introduction Course on "Data Tools First"

A study on real-world data circulation falls into acquisition, analysis, and feedback implementation of real-world data. Towards this end, it is essential to learn the use of data processing tools that are available across multiple domains including information science, engineering, medicine, and economics.

This graduate program provides a special introduction course on "Data Tools First", which teaches the target applications and basic use of data processing tools coupling with hands-on classes. This course is not counted as a credit of graduation, but helps the promotion of your research and education throughout the program.

Thank you for your attention and look forward to seeing you soon.

Date

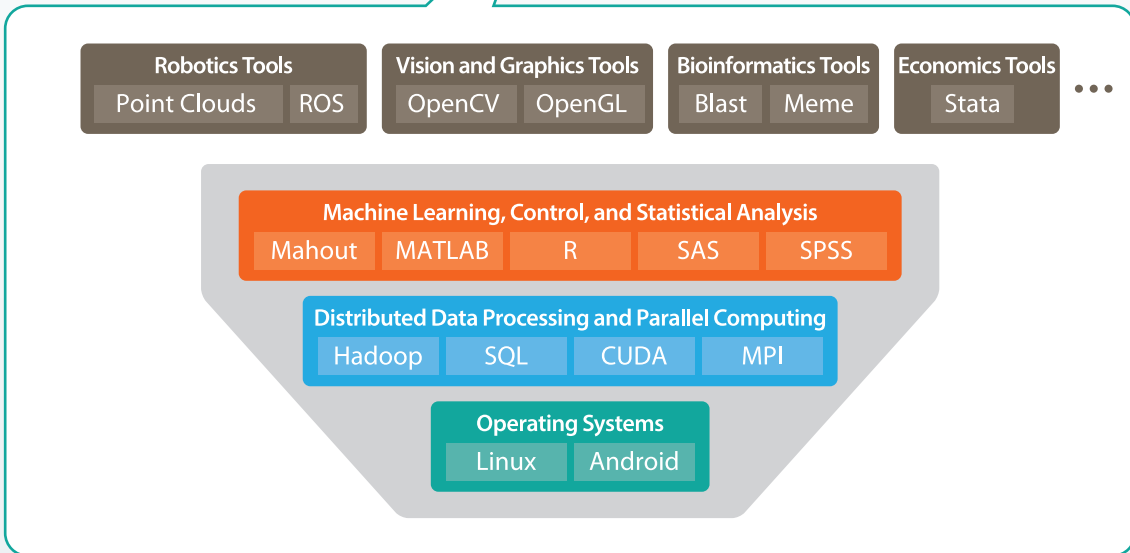
March 17 (Mon) to March 27 (Thu), 2014

Class Room

Lab 295 South IB, Nagoya University

Time Schedule

	Morning Session (8:45 – 12:00)	Afternoon Session (13:00 – 16:15)
March 17 (Mon)	SAS	SAS
March 18 (Tue)	MATLAB	MATLAB
March 19 (Wed)	SQL	Hadoop
March 20 (Thu)	R	R
March 24 (Mon)	OpenCV	ROS
March 25 (Tue)	Linux	Android
March 26 (Wed)	CUDA	MPI
March 27 (Thu)	Mahout	OpenGL



MATLAB	Programmable numerical analysis software with visualization and data analysis tools. You learn how to write a program on MATLAB using an example of vision algorithms.
R	Integrated programming language and runtime environment for statistical analysis. You learn how to write a program on R using an example of regression analysis.
SAS	Programmable statistical analysis software. You learn how to perform data analysis and write a program on SAS.
Hadoop	Integrated system software and runtime environment for large-scale distributed data processing. You learn how to write a program and use Hadoop while studying the stack of Hadoop including MapReduce and HDFS.
SQL	Query language for accessing database management systems. You learn the grammar of SQL and experience how it works using MySQL.
Mahout	Machine learning library designed to work on Hadoop. You learn how to perform recommendation, clustering, and classification on Mahout.
CUDA	Integrated development environment for general-purpose computation on GPUs. You learn how to run a parallel program using graphics boards.
MPI	Standardized message passing interface for high-performance computing. You learn how to parallelize computation and communicate with other machines using supercomputers.
ROS	Component-based software and framework for robots. You learn how to compose your program into ROS and run simultaneous localization and mapping (SLAM).
Stata	Statistical analysis software often used in economics and medicine. You learn how to visualize the results of analysis beyond the basic use of running statics.
OpenCV	Open standard library for computer vision. You learn how to manage images from cameras and detect particular objects.
OpenGL	Open standard library and API for graphics. You learn how to draw 2D and 3D polygon objects.
Linux	The most deployed UNIX-compatible OS. You learn how to use shells, editors, and file transfer commands using CentOS.
Android	Linux-based OS for smartphones and tables. You learn how to develop Android applications using laser sensors and GPS.



Contact

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