👤 Atsushi Sakai

A Japanese robotics engineer.

🔗 Links

- Twitter 🐦:@Atsushi_twi (https://twitter.com/atsushi_twi)
- Blog in Japanese 📡:MyEnigma (https://myenigma.hatenablog.com/)
- GitHub ⚙:AtsushiSakai (https://github.com/AtsushiSakai)
- Linkedin 💼:Atsushi Sakai (https://www.linkedin.com/in/atsushi-sakai-338a55127/)
- Youtube ▶:Atsushi Sakai (https://www.youtube.com/user/MrASakai/)
- Google Scholar 🎓:Atsushi Sakai (https://scholar.google.com/citations?hl=en&user=oElom3wAAAAJ)
- Patreon ❘●\:Atsushi Sakai (https://www.patreon.com/myenigma)
- Note.mu 📄:Atsushi_twi (https://note.mu/myenigma)
- Email ✉: asakaig@Gmail.com

📎 Open Source Software

- PythonRobotics (https://github.com/AtsushiSakai/PythonRobotics) Python sample codes for robotics algorithms. `stars 13k`
- SciPy (https://github.com/scipy/scipy) An open-source software for mathematics, science, and engineering. I'm a member of SciPy developer organization. `stars 8.4k`
- PyAdvancedControl (https://github.com/AtsushiSakai/PyAdvancedControl) Python sample codes for advanced control.
- PyOptSamples (https://github.com/AtsushiSakai/PyOptSamples) Python sample codes for numerical optimization.
- MATLABRobotics (https://github.com/AtsushiSakai/MATLABRobotics) MATLAB sample codes for autonomous navigation in robotics
- SimpleTkGUIKit (https://pypi.python.org/pypi/SimpleTkGUIKit/) Simple GUI kit with python Tkinter
- googleearthplot (https://pypi.python.org/pypi/googleearthplot) KML file generator for plotting on Google Earth
- pycubicspline (https://github.com/AtsushiSakai/pycubicspline) Cubic spline library on python
- rosbag_to_csv (https://github.com/AtsushiSakai/rosbag_to_csv) A GUI tool to convert topics from a rosbag file to csv files
- rosbag_filter_gui (https://github.com/AtsushiSakai/rosbag_filter_gui) A GUI tool to filter topics in a rosbag file.
- matplotlib-cpp-starter (https://github.com/AtsushiSakai/matplotlib-cpp-starter) A header library to use matplotlib from C++ code.
- numpycpp (https://github.com/AtsushiSakai/numpycpp) A c++ header library for matrix operation inspired Numpy and Scipy using Eigen.
- julia.vim (https://github.com/AtsushiSakai/julia.vim) A Vim plugin for Julia coding.
- PyJSONViewer (https://github.com/AtsushiSakai/PyJSONViewer) A JSON file data viewer using pure python.
- PyCoolPlot (https://github.com/AtsushiSakai/PyCoolPlot) A cool plotting module on Python
- pyplotjuggler (https://github.com/AtsushiSakai/pyplotjuggler) Python plot juggler
- PyRoombaAdapter (https://github.com/AtsushiSakai/PyRoombaAdapter) A Python library for Roomba Open Interface
- SciPy.jl (https://github.com/AtsushiSakai/SciPy.jl) A Julia interface for SciPy using PyCall.jl.

📖 Publications

- X. Zhang, A. Liniger, A. Sakai and F. Borrelli, "Autonomous Parking using Optimization-Based Collision Avoidance", IEEE Conference on Decision and Control (CDC) (https://cdc2018.ieeecss.org/), Dec 2018. Link (https://ieeexplore.ieee.org/document/8619433), [open-source code] (https://github.com/XiaojingGeorgeZhang/H-OBCA).
- Atsushi Sakai, Daniel Ingram, Joseph Dinius, Karan Chawla, Antonin Raffin: "PythonRobotics: a Python code collection of robotics algorithms", arXiv:1808.10703, (2018); Link (http://arxiv.org/abs/1808.10703).
- Atsushi Sakai, and Yoji Kuroda. "Discriminatively Trained Unscented Kalman Filter for Mobile Robot Localization." Journal of Advanced Research in Mechanical Engineering 1.3 (2010). Link (https://sites.google.com/site/atsushisakaishomepage/paper-list/Discriminatively%20Trained%20Unscented%20Kalman.pdf?attredirects=0&d=1)
- Y. Kuroda, A. Sakai, Y. Tamura, "Six-Degree-of-Freedom Localization using an Unscented Kalman Filter for Planetary Rovers", Journal of Advanced Robotics 24 (8-9), 1199-1218 (2010). Link (https://www.tandfonline.com/doi/abs/10.1163/016918610X501273)
- Atsushi Sakai, Teppei Saitoh, and Yoji Kuroda. "Robust landmark estimation and unscented particle sampling for SLAM in dynamic outdoor environment." Journal of Robotics and Mechatronics 22.2 (2010): 140. Link (https://www.fujipress.jp/jrm/rb/robot002200020140/)
- A. Sakai, M. Mitsuhashi, and Y. Kuroda, "Noise model creation for visual odometry with neural-fuzzy model" 2010 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2010), Taipei, Taiwan, 2010, pp. 5190-5195. Link (https://ieeexplore.ieee.org/abstract/document/5651185)
- A. Sakai, Y. Tamura and Y. Kuroda, "An efficient solution to 6DOF localization using Unscented Kalman Filter for planetary rovers," 2009 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2009), St. Louis, MO, 2009, pp. 4154-4159. Link (https://ieeexplore.ieee.org/abstract/document/5354677)

🎤 Talks

- 『The Full Autonomous Racing System 概説』 (https://docs.google.com/presentation/d/1PTq1ZTDpa_PAkXMJO7lsR9G-EzYDayarLOmScTw3gBs/edit?usp=sharing) 第6回 HarajukuSQuare(@Seqsense社) 2019/05/31 (https://www.seqsense.com/)
- 『PythonRobotics: a Python code collection of robotics algorithms』 (https://docs.google.com/presentation/d/1QhcGvjxO_zBzwIKxZYbsmWFkct_h7eXDrZ82JqsGVYg/edit?usp=sharing) ROS Japan UG #27 勉強会 2018/12/17 (https://rosjp.connpass.com/event/111853/)
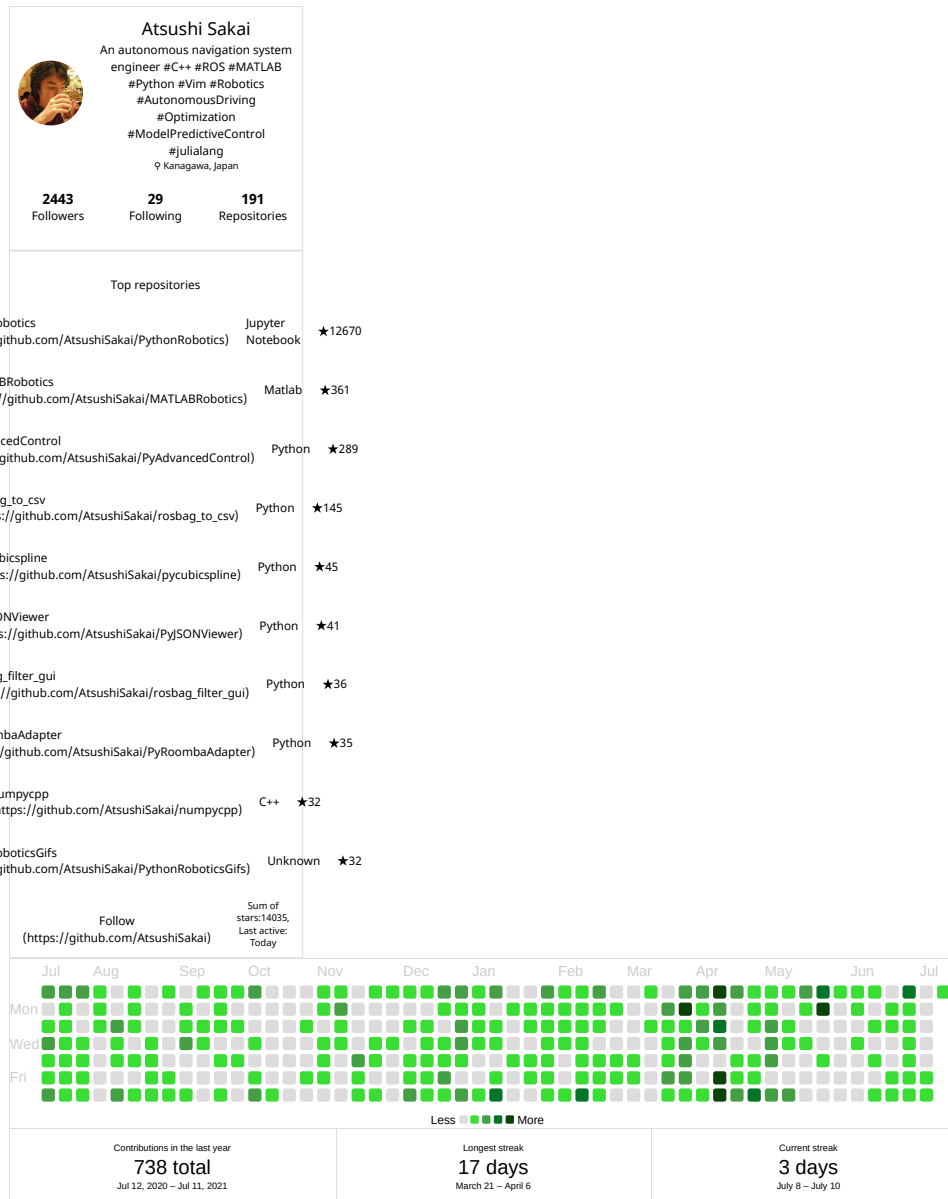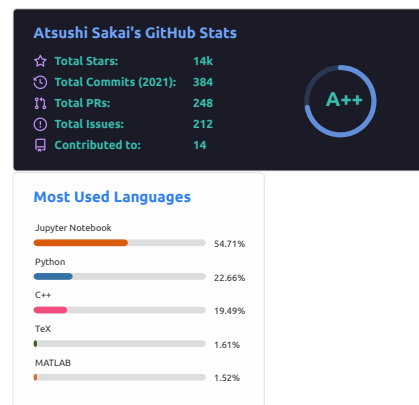- 『トレーラートラックの自動駐車計画アルゴリズムの紹介』 (https://docs.google.com/presentation/d/13tuWC_POpDRrIvYQc34wHeW895TP9278VQiRmRluus4/edit?usp=sharing) ROS Japan UG #24 勉強会 2018/06/20 (https://rosjp.connpass.com/event/89616/presentation/)

🌐 Web Apps

- Today Tool (https://atsushisakai.github.io/TodayTool/)
- Tex Converter (https://atsushisakai.github.io/tex-tool/)

👍 Likes

ℹ️ GitHub Widget

Atsushi Sakai

An autonomous navigation system engineer #C++ #ROS #MATLAB #Python #Vim #Robotics #AutonomousDriving #Optimization #ModelPredictiveControl #julialang

📍 Kanagawa, Japan

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PythonRobotics (https://github.com/AtsushiSakai/PythonRobotics)	Jupyter Notebook	★12670
MATLABRobotics (https://github.com/AtsushiSakai/MATLABRobotics)	Matlab	★361
PyAdvancedControl (https://github.com/AtsushiSakai/PyAdvancedControl)	Python	★289
rosbag_to_csv (https://github.com/AtsushiSakai/rosbag_to_csv)	Python	★145
pycubicspline (https://github.com/AtsushiSakai/pycubicspline)	Python	★45
PyJSONViewer (https://github.com/AtsushiSakai/PyJSONViewer)	Python	★41
rosbag_filter_gui (https://github.com/AtsushiSakai/rosbag_filter_gui)	Python	★36
PyRoombaAdapter (https://github.com/AtsushiSakai/PyRoombaAdapter)	Python	★35
numpycpp (https://github.com/AtsushiSakai/numpycpp)	C++	★32
PythonRoboticsGifs (https://github.com/AtsushiSakai/PythonRoboticsGifs)	Unknown	★32

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Contributions in the last year	Longest streak	Current streak
738 total	**17 days**	**3 days**
Jul 12, 2020 – Jul 11, 2021	March 21 – April 6	July 8 – July 10

Atsushi Sakai's GitHub Stats

⭐ Total Stars: 14k
🕐 Total Commits (2021): 384
⑂ Total PRs: 248
① Total Issues: 212
🖥 Contributed to: 14

A++

Most Used Languages

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ツイート   1

For more details and requests, contact @Atsushi_twi (https://twitter.com/atsushi_twi).