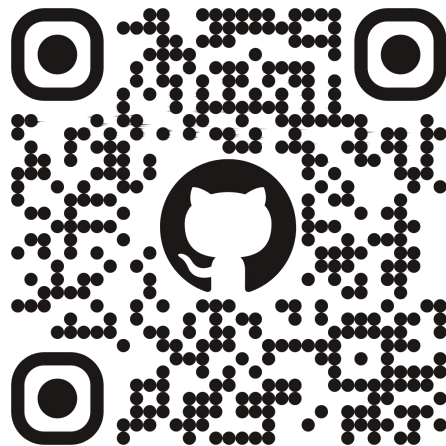


ros2-aliases の紹介

木村 駿介

[@kimushun1101](#)

<https://github.com/kimushun1101/ros2-aliases> →



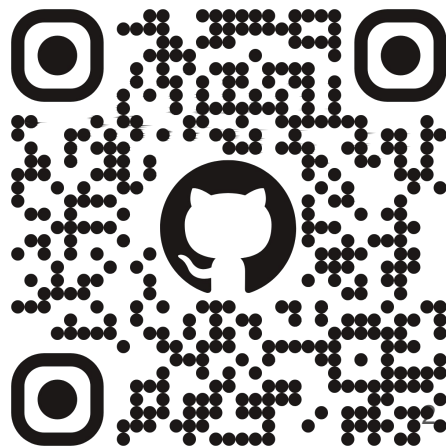
ROSCon JP 2023 にて



いろいろな ROS あるある
(**お悩み事**)が共有された。

全てではありませんが

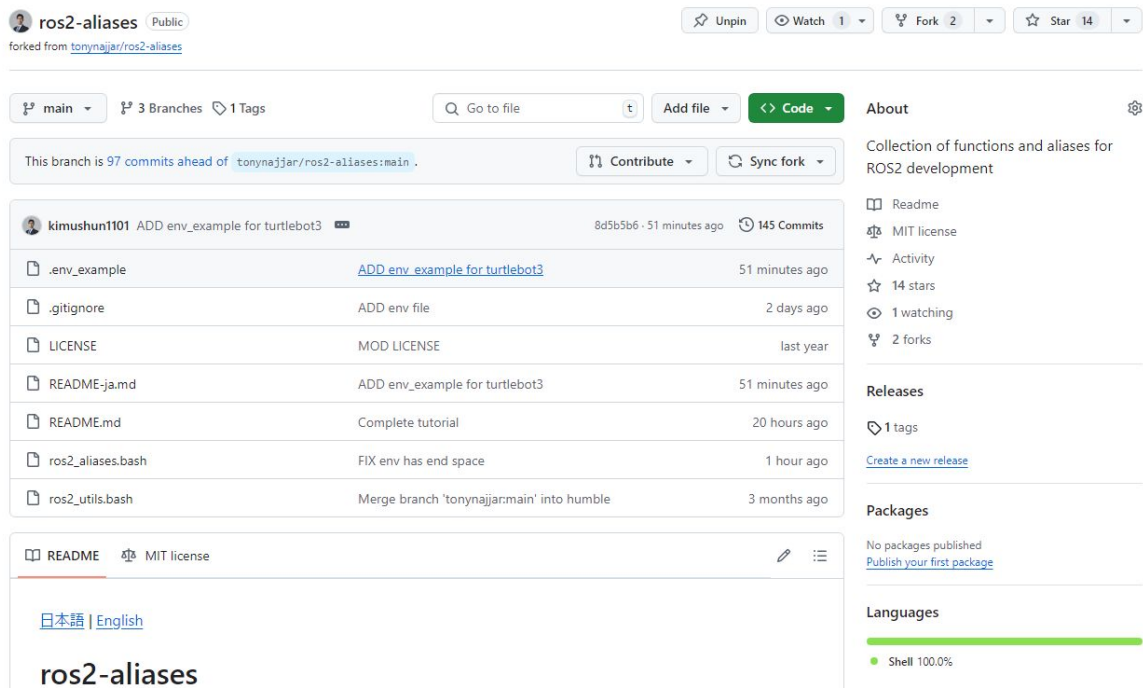
それ、**ROS2-aliases** で
解決できます



[株式会社アールティ @rt_corp の X](https://twitter.com/rt_corp) より

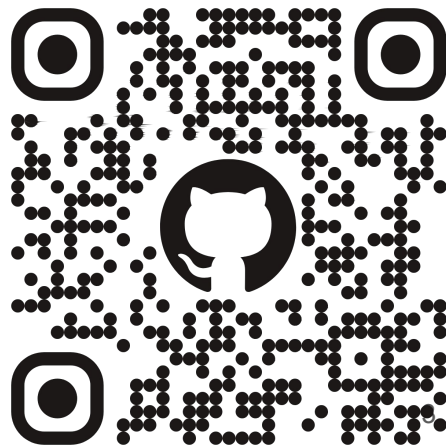
ros2-aliases ってなに？

ROS 2 開発に **便利なショートカットコマンド** を提供します。



The screenshot shows the GitHub repository page for `ros2-aliases`. The repository is public and forked from `tonynajjar/ros2-aliases`. It has 14 stars and 2 forks. The repository description is "Collection of functions and aliases for ROS2 development". The repository is currently on the `main` branch, which is 97 commits ahead of the upstream `main` branch. The commit history shows a recent commit by `kimushun101` titled "ADD env_example for turtlebot3" 51 minutes ago. The file list includes `.env_example`, `.gitignore`, `LICENSE`, `README-ja.md`, `README.md`, `ros2_aliases.bash`, and `ros2_utils.bash`. The repository also has a README, MIT license, and 1 tag. The repository is currently not published as a package.

File	Commit Message	Time
<code>.env_example</code>	ADD env_example for turtlebot3	51 minutes ago
<code>.gitignore</code>	ADD env file	2 days ago
<code>LICENSE</code>	MOD LICENSE	last year
<code>README-ja.md</code>	ADD env_example for turtlebot3	51 minutes ago
<code>README.md</code>	Complete tutorial	20 hours ago
<code>ros2_aliases.bash</code>	FIX env has end space	1 hour ago
<code>ros2_utils.bash</code>	Merge branch 'tonynajjar:main' into humble	3 months ago



(個人的)ROS あるある①

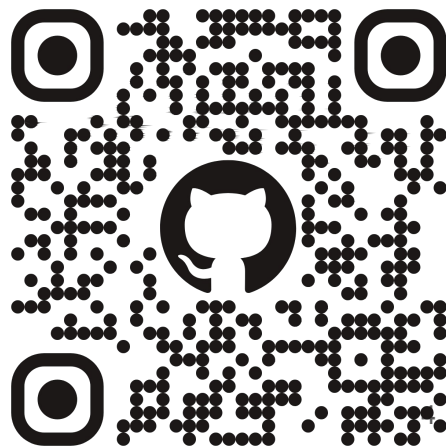
間違えたディレクトリで colcon build



A terminal window with a dark background. The title bar shows 'kimura@msi-win: ~/ros2-alias'. The prompt is 'kimura@humble:~/ros2-aliases_ws/src\$' and the command 'colcon build' is entered. A red arrow points from a callout box to the 'src' part of the path. The callout box contains the text 'ここ src だよ!'.

```
kimura@msi-win: ~/ros2-alias × + ▾ - □ ×  
kimura@humble:~/ros2-aliases_ws/src$ colcon build|
```

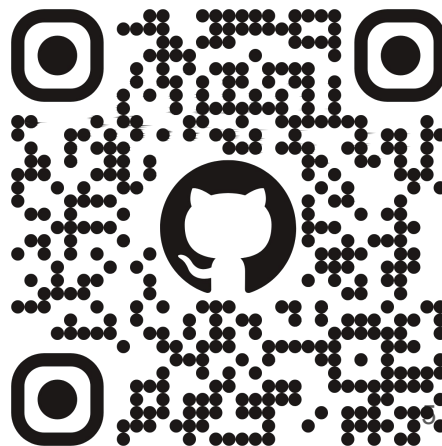
ここ src だよ!



(個人的)ROS あるある①

間違えたディレクトリで colcon build

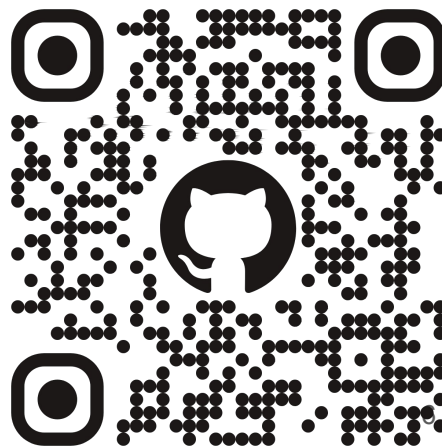
```
kimura@msi-win: ~/ros2-alias × + v - □ ×  
kimura@humble:~/ros2-aliases_ws/src$ colcon build  
Starting >>> tb3_controller_cpp  
Starting >>> teleop_joy_component  
Finished <<< tb3_controller_cpp [13.1s]  
Finished <<< teleop_joy_component [17.2s]  
  
Summary: 2 packages finished [17.7s]  
kimura@humble:~/ros2-aliases_ws/src$ ls  
build      tb3_controller_cpp  
install    teleop_joy_component_template  
log  
kimura@humble:~/ros2-aliases_ws/src$
```



ros2-aliases なら①

cb コマンドを使えば

```
kimura@msi-win: ~  
kimura@humble:~$ cb  
colcon build --symlink-install --parallel-workers  
16  
Starting >>> tb3_controller_cpp  
Starting >>> teleop_joy_component  
Finished <<< tb3_controller_cpp [0.11s]  
Finished <<< teleop_joy_component [0.14s]  
  
Summary: 2 packages finished [0.37s]  
kimura@humble:~$ |
```

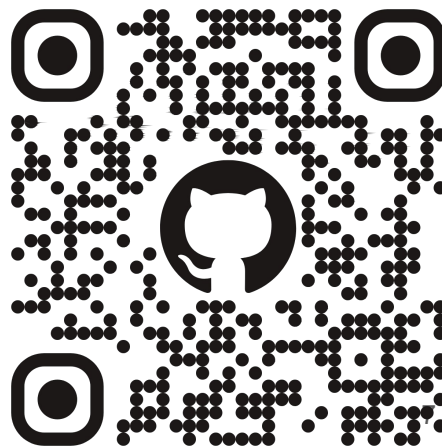


ros2-aliases なら①

どこのディレクトリに居ようが正しくビルド！

```
kimura@msi-win: ~  
kimura@humble:~$ cb  
colcon build --symlink-install --parallel-workers  
16  
Starting >>> tb3_controller_cpp  
Starting >>> teleop_joy_component  
Finished <<< tb3_controller_cpp [0.11s]  
Finished <<< teleop_joy_component [0.14s]  
  
Summary: 2 packages finished [0.37s]  
kimura@humble:~$ ls ~/ros2-aliases_ws/  
build install log src  
kimura@humble:~$ |
```

デフォルトでオプションも付く
ビルド後に自動でsourceもされる

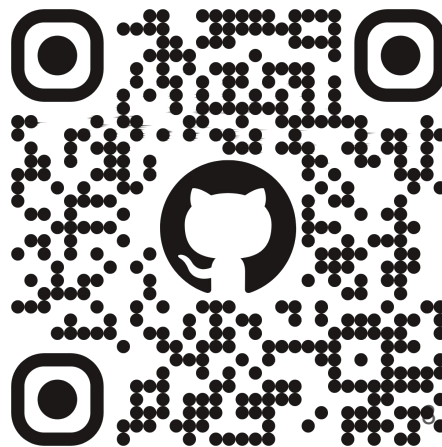


(個人的)ROS あるある②

パッケージ名、ノード名、トピック名なんだっけ？

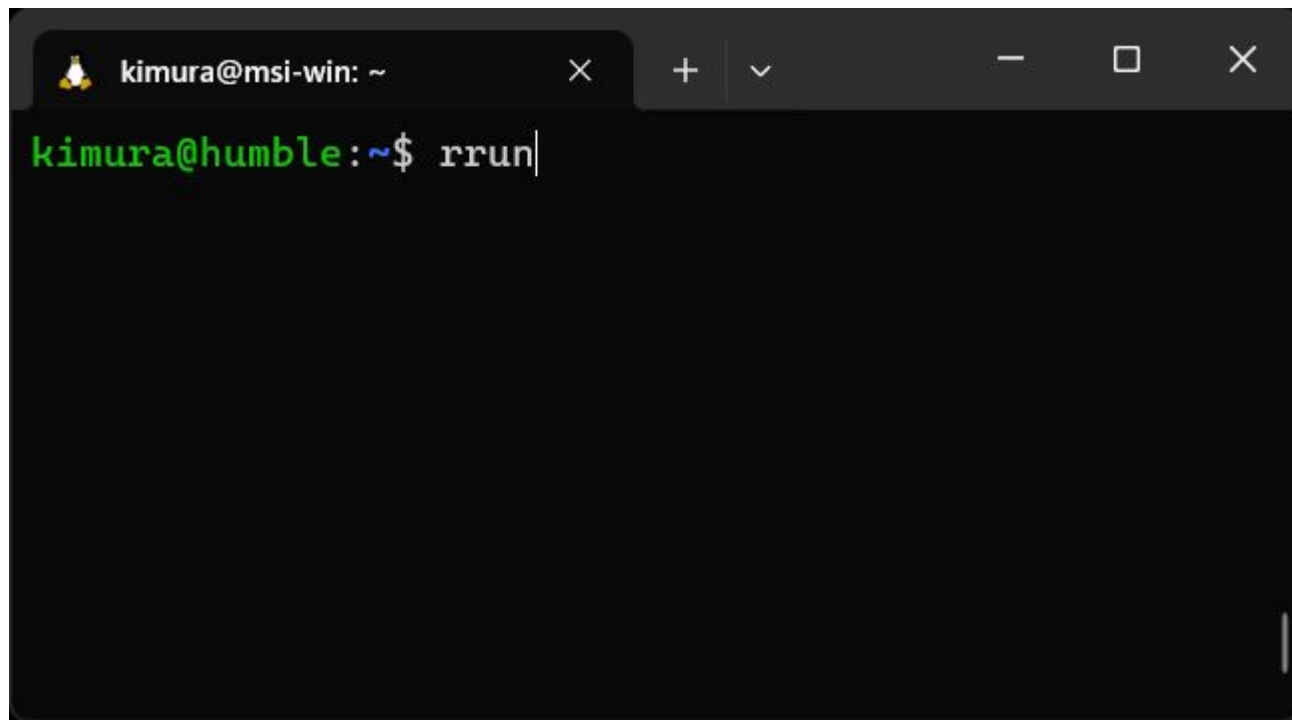
```
kimura@msi-win: ~  
kimura@humble:~$ ros2 run tb3_controller_cpp tb3_c  
ontroller node  
[INFO] [1727070490.630225815] [tb3_controller]: tb  
3_controller node has been initialised  
[INFO] [1727070490.630322515] [tb3_controller]: Kp  
: 1  
[INFO] [1727070490.630353215] [tb3_controller]: T  
: 0.01  
[INFO] [1727070490.630426415] [tb3_controller]: in  
itial xd : 1
```

そもそもコマンドが
長すぎる

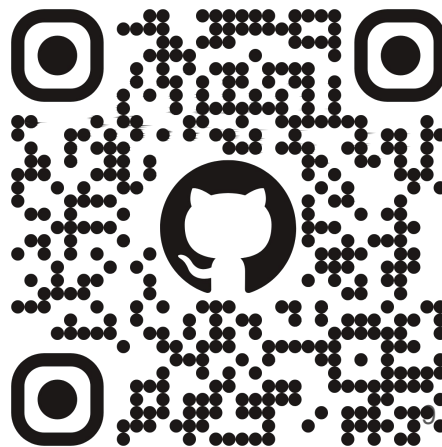


ros2-aliases なら②

rrun (ros2 run) コマンドを入力すると

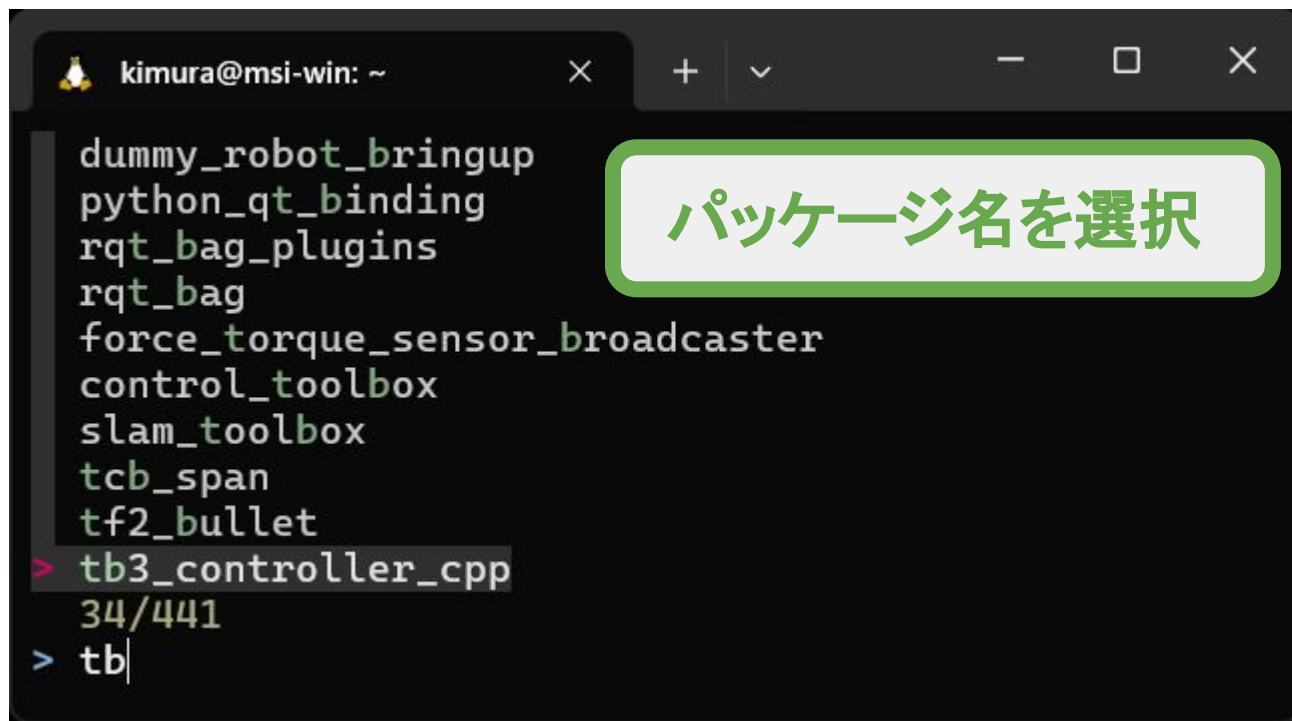
A terminal window with a dark background. The title bar shows 'kimura@msi-win: ~' and standard window controls. The prompt is 'kimura@humble:~\$' and the command 'rrun' is being entered.

```
kimura@msi-win: ~  
kimura@humble:~$ rrun|
```

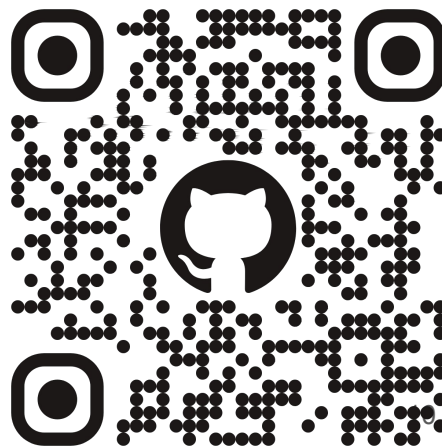


ros2-aliases なら②

fzf (fuzzy finder) であいまい検索できる！

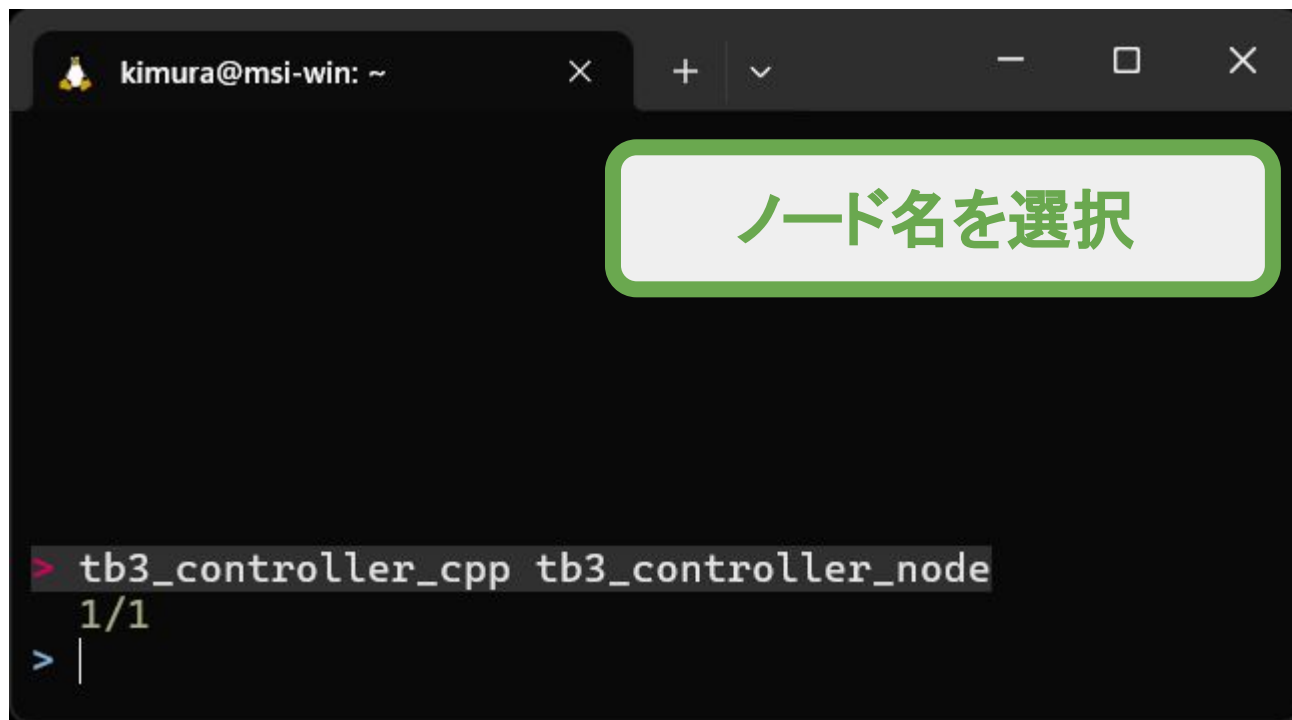
A terminal window titled 'kimura@msi-win: ~' with standard window controls. It displays a list of ROS2 packages: dummy_robot_bringup, python_qt_binding, rqt_bag_plugins, rqt_bag, force_torque_sensor_broadcaster, control_toolbox, slam_toolbox, tcb_span, tf2_bullet, and tb3_controller_cpp. The package 'tb3_controller_cpp' is highlighted with a green background. Below the list, the text '34/441' is shown, and the prompt '> tb|' is visible. A green callout box with a white background and a green border contains the Japanese text 'パッケージ名を選択' (Select package name).

```
kimura@msi-win: ~  
dummy_robot_bringup  
python_qt_binding  
rqt_bag_plugins  
rqt_bag  
force_torque_sensor_broadcaster  
control_toolbox  
slam_toolbox  
tcb_span  
tf2_bullet  
> tb3_controller_cpp  
34/441  
> tb|
```



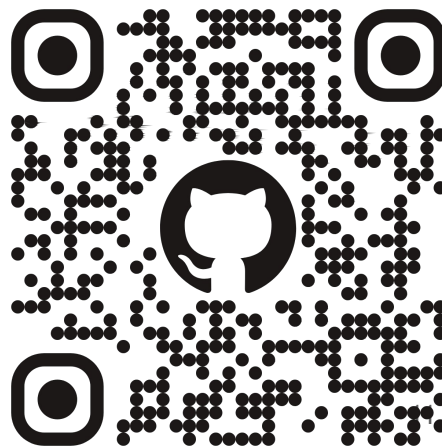
ros2-aliases なら②

fzf (fuzzy finder) であいまい検索できる！



A terminal window with a dark background. The title bar shows 'kimura@msi-win: ~' and window control buttons. A green rounded rectangle highlights the text 'ノード名を選択' (Select node name). Below, a terminal prompt shows the command 'tb3_controller_cpp tb3_controller_node' and the output '1/1'.

```
kimura@msi-win: ~  
> tb3_controller_cpp tb3_controller_node  
1/1  
> |
```



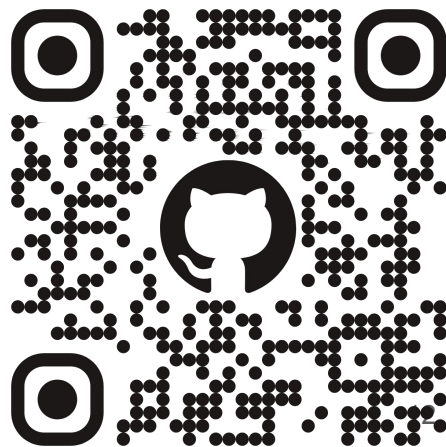
ros2-aliases なら②

fzf (fuzzy finder) であいまい検索できる！

```
kimura@msi-win: ~  
kimura@humble:~$ rrun  
ros2 run tb3_controller_cpp tb3_controller_node  
[INFO] [1727070459.759517152] [tb3_controller]: tb  
3_controller node has been initialised  
[INFO] [1727070459.759611052] [tb3_controller]: Kp  
: 1  
[INFO] [1727070459.759642252] [tb3_controller]: T  
: 0.01  
[INFO] [1727070459.759692552] [tb3_controller]: in  
itial xd : 1
```

結果としてこれが実行

他の例として
rtecho は
トピック名を fzf して
ros topic echo

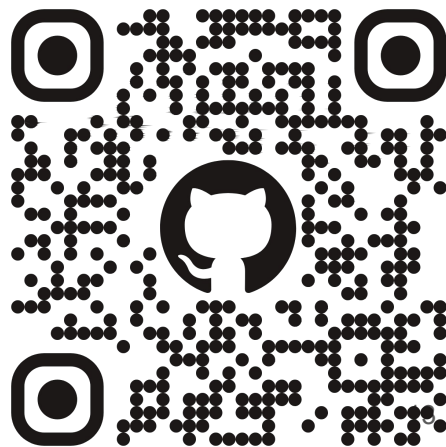


(個人的)ROS あるある③

roscdがない。roscdがほしい！

 「ROS 1 を使えばいいのに...」

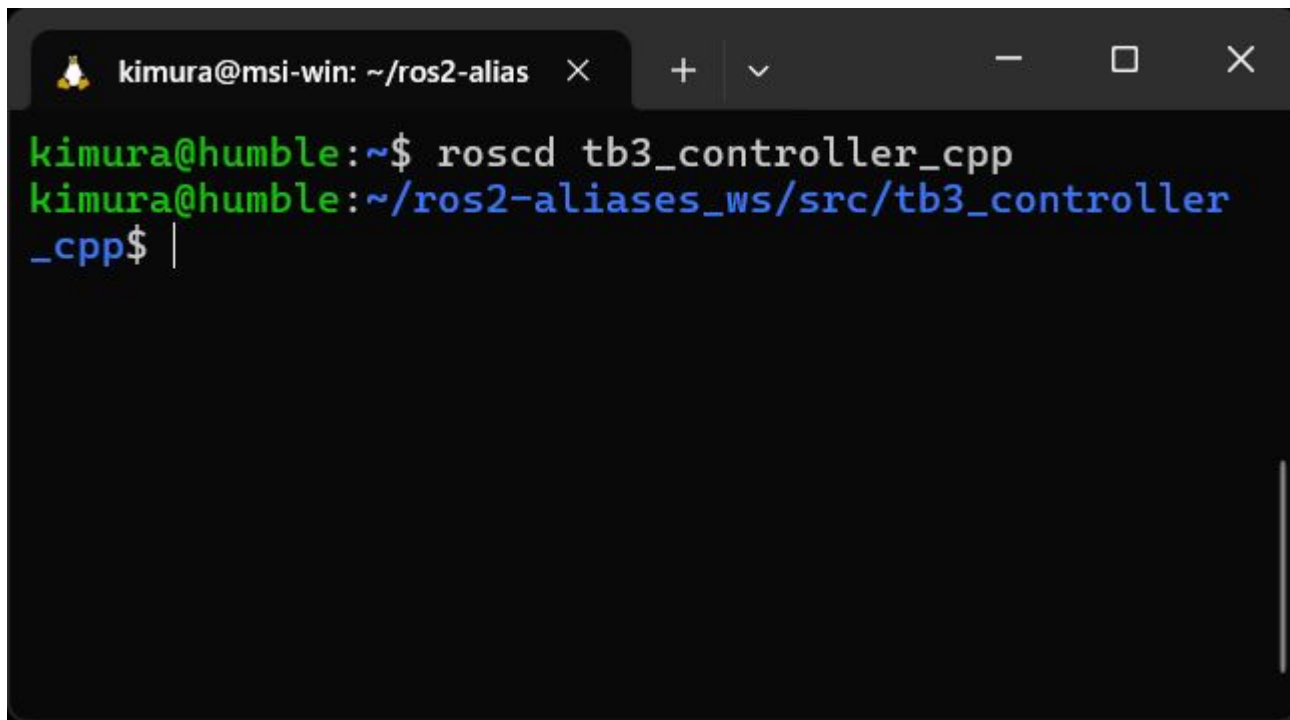
```
kimura@msi-win: ~  
kimura@humble:~$ roscd tb3_controller_cpp  
Command 'roscd' not found, did you mean:  
  command 'roscd' from deb python3-rosinstall (0.7  
.8-5)  
Try: sudo apt install <deb name>  
kimura@humble:~$ |
```



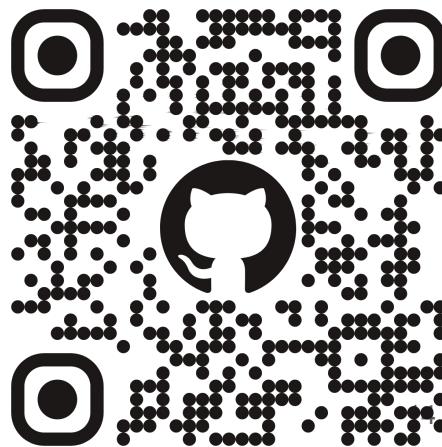
ros2-aliases なら③

あるよ!

tab補完も効くし、引数なしで実行すれば fzf でパッケージ名検索する



```
kimura@msi-win: ~/ros2-alias × + ▾ - □ ×  
kimura@humble:~$ roscd tb3_controller_cpp  
kimura@humble:~/ros2-aliases_ws/src/tb3_controller  
_cpp$ |
```



日本語 | English

「日本語」をクリック！

ros2-aliases

Collection of functions and aliases for ROS2 development

ハンズオンチュートリアル を書きました。

実際に手を動かして 遊んでみてください。

インストール、アンインストールも簡単。

ROS 2 完全に理解した人なら 10分 で終わる量。

