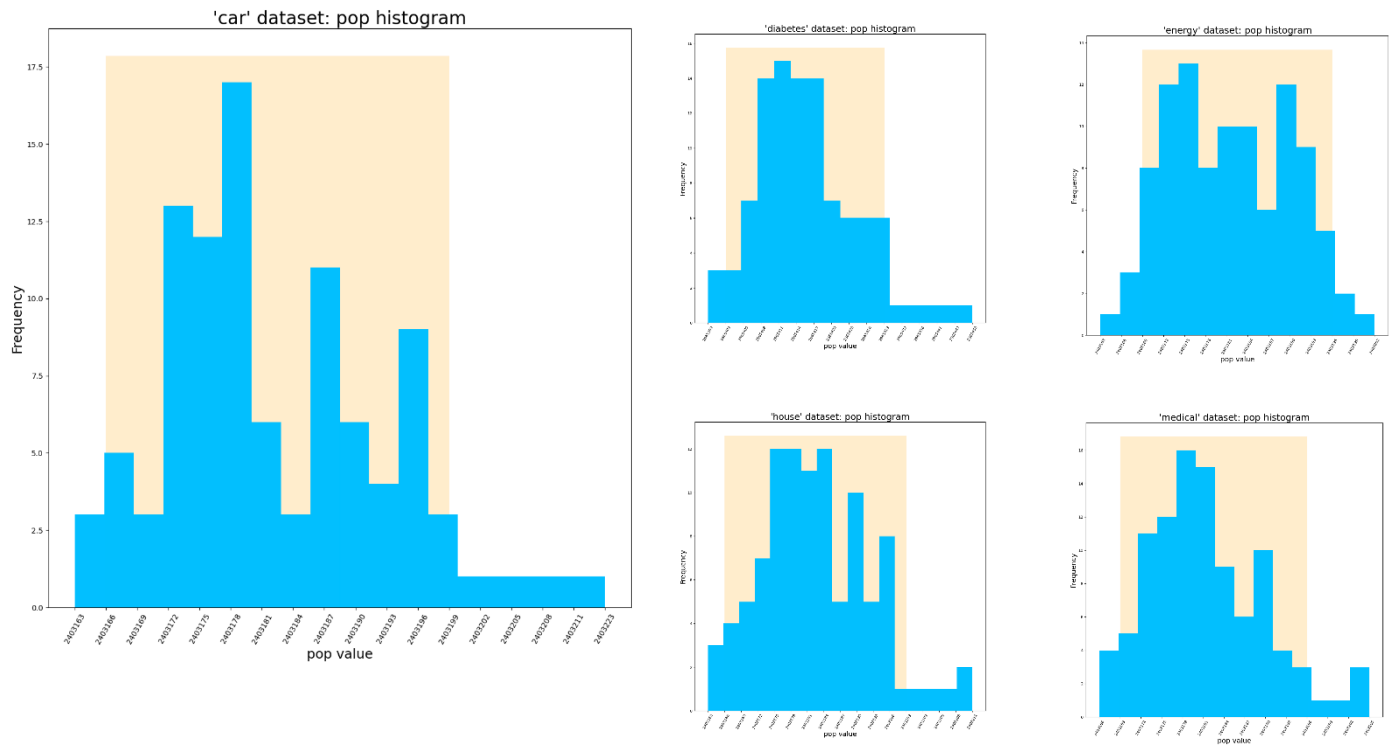
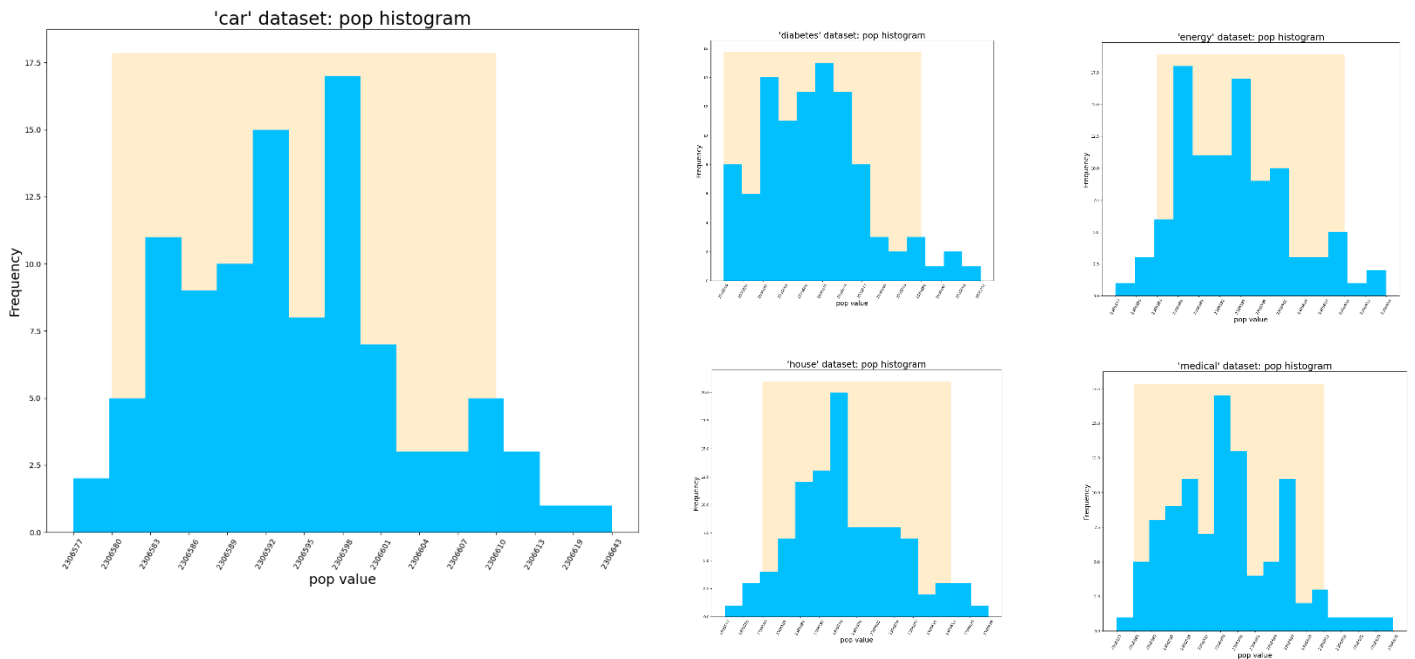


# 1. Histograms of POP Values

- In Raspberry Pi



- In Rodo's Laptop



Note that **PUSH** Histograms are not added as they have the exact distribution to their **POP** Histograms

## 2. Comparison

- Traces in either Laptop or RPi shows consistent POP/PUSH/SGROW/SSHRINK count **in** and **after** function\_start() => function\_end() (Figure 1)
- POP/PUSH in either Laptop or RPi are idempotent **before** function\_start() => function\_end(). However, srow and SSHRINK in this area does not change. (Figure 1)

filepath	file no.	pop_before_A	push_before_A	sgrow_before_A	sshrink_before_A	pop_in_A	push_in_A	sgrow_in_A	sshrink_in_A	pop_after_A	push_after_A	sgrow_after_A	sshrink_after_A
linear_reg	1	2403181	4383483	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	2	2403178	4383478	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	3	2403190	4383498	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	4	2403190	4383498	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	5	2403172	4383468	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	6	2403199	4383513	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	7	2403172	4383468	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	8	2403184	4383488	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	9	2403172	4383468	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	10	2403196	4383508	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	11	2403175	4383473	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	12	2403196	4383508	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	13	2403169	4383463	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	14	2403178	4383478	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	15	2403172	4383468	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	16	2403187	4383493	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	17	2403163	4383453	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	18	2403172	4383468	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	19	2403175	4383473	124	164170	28890	56358	7	1334	186	336	0	17
linear_reg	20	2403196	4383508	124	164170	28890	56358	7	1334	186	336	0	17

Figure 1

- RPI trace has more POP / PUSH / SSHRINK before function\_start() => function\_end() area than LAPTOP's. But at several areas, the numbers can be smaller.

filepath	file no.	pop_before_A	push_before_A	sgrow_before_A	sshrink_before_A	pop_in_A	push_in_A	sgrow_in_A	sshrink_in_A	pop_after_A	push_after_A	sgrow_after_A	sshrink_after_A
Rpi (1)	1	2403181	4383483	124	164170	28890	56358	7	1334	186	336	0	17
Laptop (1)	1	2306607	4200178	124	157711	28898	56372	7	1334	189	340	0	18
filepath	file no.	pop_before_A	push_before_A	sgrow_before_A	sshrink_before_A	pop_in_A	push_in_A	sgrow_in_A	sshrink_in_A	pop_after_A	push_after_A	sgrow_after_A	sshrink_after_A
RPI diabetes	1	2865408	5025753	124	187096	26614	61554	0	1341	186	336	0	17
Laptop_diabetes	1	2535662	4565458	124	175363	26614	61554	0	1341	189	340	0	18
filepath	file no.	pop_before_A	push_before_A	sgrow_before_A	sshrink_before_A	pop_in_A	push_in_A	sgrow_in_A	sshrink_in_A	pop_after_A	push_after_A	sgrow_after_A	sshrink_after_A
RPI energy	1	2403181	4383483	124	164170	24295	46869	6	1121	186	336	0	17
Laptop_energy	1	2306580	4200133	124	157711	24303	46883	6	1121	189	340	0	18
filepath	file no.	pop_before_A	push_before_A	sgrow_before_A	sshrink_before_A	pop_in_A	push_in_A	sgrow_in_A	sshrink_in_A	pop_after_A	push_after_A	sgrow_after_A	sshrink_after_A
RPI house	1	2403193	4383503	124	164170	41205	82737	2	1958	186	336	0	17
Laptop_house	1	2306595	4200158	124	157711	41213	82751	2	1958	189	340	0	18
filepath	file no.	pop_before_A	push_before_A	sgrow_before_A	sshrink_before_A	pop_in_A	push_in_A	sgrow_in_A	sshrink_in_A	pop_after_A	push_after_A	sgrow_after_A	sshrink_after_A
RPI medical	1	2403172	4383468	124	164170	23174	44586	5	1077	186	336	0	17
Laptop_medical	1	2306604	4200173	124	157711	23182	44600	5	1077	189	340	0	18

Figure 2