



# BWAPI CMPUT 350 Bot - Marvin

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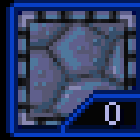


- Improved scouting abilities for harass
- Behaviours:
  - Less aggressive
  - Builds extractor



Zerg Overlord

Detector



- Changed the overlord behaviour to match a detector's
- Previous state: stagnant overlords



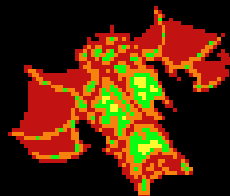
Zerg Zergling



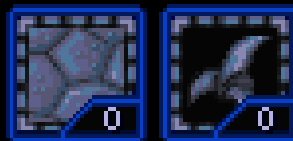
- Exploited Zerg's advantage in early Pushes, implemented "early pool" strategy to counter mid-game and late-game strategies.
- Exceptional Early Game strategy



- Implemented strategy involving Lurker Production with smart expanding
- Giving basic Burrow/Unburrowing micro, integrated with UalbertaBot's squad manager.
- Great mid-game Strategy.



Zerg Mutalisk



- Takes advantage of Zerg's early air superiority
- Mutalisks have high mobility and is one of the fastest air units to build.

Video

# Implemented Smart strategy choosing

- Will not chose strategy randomly, will base strategy selection based upon previous victory/losses.
- Becomes more effective with a larger number of games played



# Overall Stats

	Overall Tournament Statistics							
	Games	Win	Loss	Win %	AvgTime	Hour	Crash	Timeout
UAlbertaBot	80	72	8	90	9:06	0	1	0
Skynet	80	66	14	82.5	9:55	0	1	0
Xelnaga	79	46	33	58.23	13:46	1	1	4
ICEStarCraft	80	41	39	51.25	15:13	1	1	2
Aiur	80	38	42	47.5	14:34	3	1	6
Ximp	79	36	43	45.57	12:21	0	8	15
Marvin	80	33	47	41.25	11:21	1	4	1
BTHAI	80	18	62	22.5	14:31	0	2	6
Nova	80	9	71	11.25	4:24	0	54	2
<b>Total</b>	359	359	359	N/A	11:41	3	73	36

# Winners

	Bot vs. Bot Results - (Row,Col) = Row Wins vs. Col									
	Win %	UAlbe	Skyne	Xelna	ICEST	Aiur	Ximp	Marvi	BTHAI	Nova
UAlbertaBot	90	-	9	6	10	9	9	9	10	10
Skynet	82.5	1	-	6	10	10	10	10	10	9
Xelnaga	58.23	4	4	-	9	5	3	3	9	9
ICEStarCraft	51.25	0	0	1	-	5	6	9	10	10
Aiur	47.5	1	0	5	5	-	2	7	9	9
Ximp	45.57	1	0	6	4	8	-	2	6	9
Marvin	41.25	1	0	7	1	3	8	-	6	7
BTHAI	22.5	0	0	1	0	1	4	4	-	8
Nova	11.25	0	1	1	0	1	1	3	2	-

# Maps

	Bot Win Percentage By Map									
	Benzene	Destina	Heartbr	Aztec	TauCros	Androme	Circuit	Empireo	Fortres	Python
UAlbertaBot	87 %	100 %	87 %	87 %	87 %	87 %	100 %	75 %	100 %	87 %
Skynet	87 %	75 %	75 %	87 %	87 %	87 %	75 %	87 %	87 %	75 %
Xelnaga	50 %	50 %	87 %	50 %	37 %	25 %	62 %	75 %	75 %	71 %
ICESTarCraft	50 %	50 %	50 %	50 %	37 %	75 %	62 %	50 %	50 %	37 %
Aiur	25 %	62 %	37 %	62 %	62 %	37 %	37 %	37 %	62 %	50 %
Ximp	62 %	50 %	50 %	37 %	62 %	37 %	37 %	62 %	0 %	57 %
Marvin	62 %	12 %	37 %	50 %	25 %	75 %	37 %	37 %	37 %	37 %
BTHAI	25 %	12 %	25 %	25 %	12 %	25 %	37 %	25 %	25 %	12 %
Nova	0 %	37 %	0 %	0 %	37 %	0 %	0 %	0 %	12 %	25 %

# Advantages and Disadvantages

- Zerg Has a lot of race specific advantages, like early detectors, high mobility, fast expansion. Great for map superiority.
- Zerg has a disadvantage on larger maps (most tournament maps are larger then the vanilla Blizzard maps) for the Zergling rush due to the distance that Zerglings have to travel

# Future Work

- The current bot is far too dependent on being Protoss
- The build order search for Zerg is more or less broken
- Our Mutalisk strategy is vulnerable to rushes
- Try more late game strategies

# Questions?

