

eSports for Engineers

version 4.0

an award-winning strategy or engineering simulation game
for each day of the week, free and easy to install on linux, no
internet connection required to play

project page:
search for esports-for-engineers on github

How it Works

- Install Ubuntu 20.04 LTS linux. A fast computer is not required, and installation is straightforward. You can install Ubuntu 20.04 LTS on an old PC or laptop in about half an hour.
- Install Ubuntu repository packages and the winehq-staging version of the wine MS Windows emulation layer
- Download and unpack esports-for-engineers_v40.tar.gz
- Run the launcher script, type `./launcher.py`

eSports for Engineers

average score for last 7 days: 0

- [1] MON: Contract Bridge
- [2] TUE: Historical Sim Racing
- [3] WED: Deep Learning Chess
- [4] THU: Historical Flight/War Sim
- [5] FRI: Deep Learning Weiqi
- [6] SAT: Flight/War Sim (Advanced)
- [7] Export Scores and game output files
- [8] Read Documentation
- [9] Reset Scores
- [10] Exit

Choose number listed above:

A different computer sparing partner for each day of the week

MON former computer world Contract Bridge champion wBridge5

TUE Sir Isaac Newton, in the form of realistic Newtonian physics of a sim racing re-creation of dozens of Grand Prix races from the 1950's and 1960's era, when driver skill was the dominant factor in determining the winner

WED The deep learning program Leela Chess Zero, a clone of world Chess and Go champion Alpha Zero

THU Newton again, this time with the realistic physics of a flight and war simulation of a historical conflict from 1940 and 1950, at times when the aircraft were very difficult to fly and when pilot skill determined outcomes.

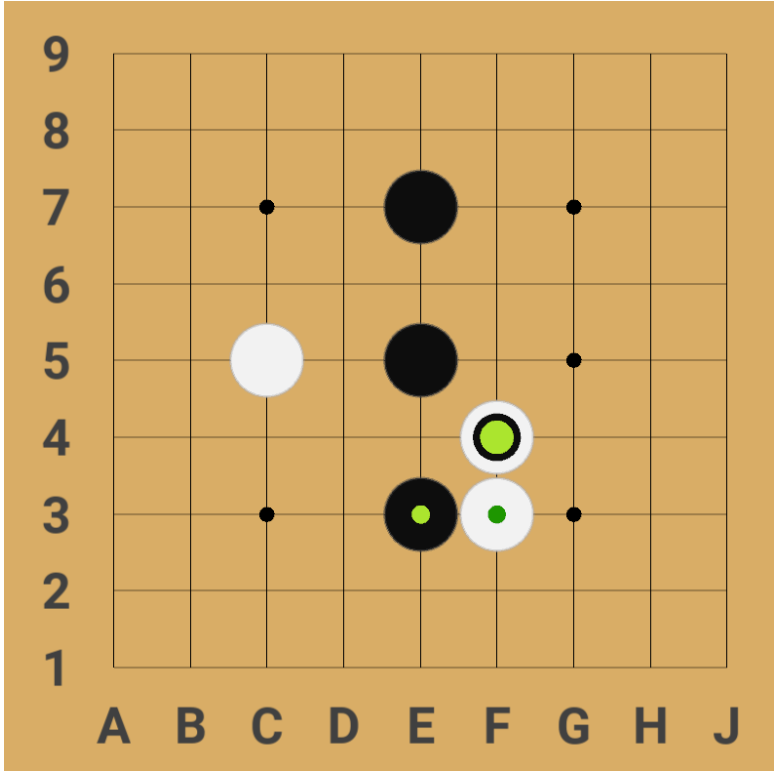
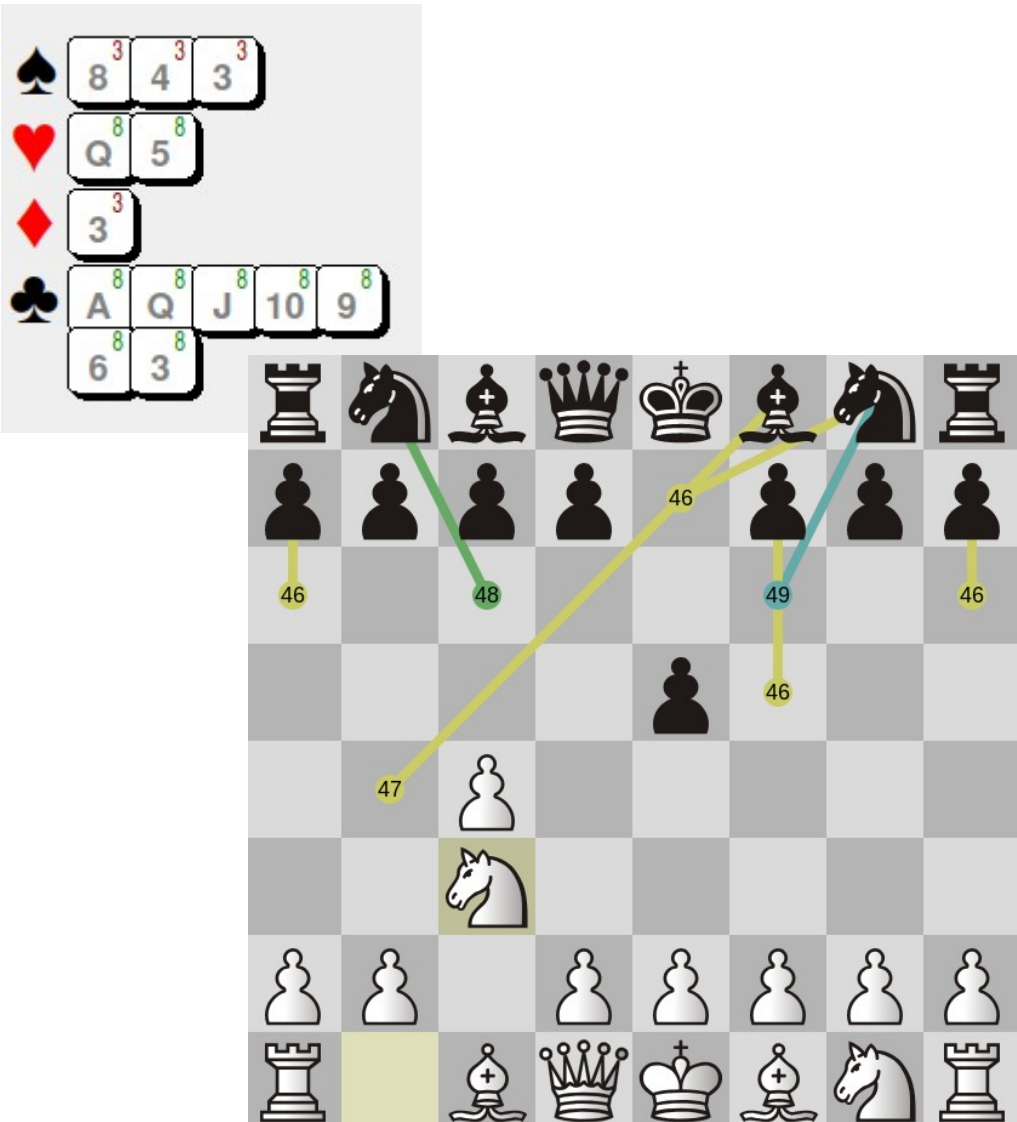
FRI The KataGo clone of Alpha Zero, playing Go

SAT flight and war simulations of historical Cold War era conflicts in the Middle East and the Balkans

The Grand Prix Legends (GPL) Demo provides 30 historically accurate race tracks and 80 different race cars. The sim recreates F1 world championships from the 1950's and 1960's, an era when powerful, hard-to-control cars put a premium on driver skill. Most of these cars are overpowered open wheelers which rely on mechanical grip alone, i.e. without aerodynamic effects "clamping" cars to the ground. You see the suspensions working, feel the springs compressing, notice the differential working differently as you change its settings and sense the oversteer / understeer acutely as the cars respond to throttle, brake, pitch and yaw.

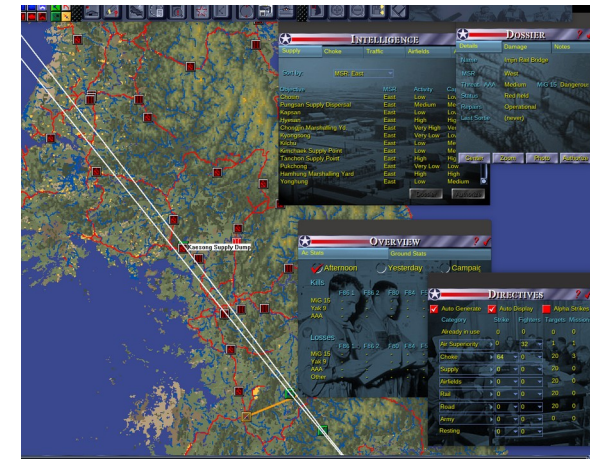


Open source versions of the world champion Alpha Zero programs for Chess and Go, configured for training and analysis, are included. Thanks to the revolution in deep learning, these programs can be adjusted to play Chess and Go at your level, and with a human-like playing style. wBridge5, a former Computer Bridge World Champion is included as well, as are several graphical interfaces and analysis tools.



The classic Korean war flight sim Mig Alley is also in this package. Mig Alley is to combat flight sims what Grand Prix Legends is to sim racing. At the dawn of the jet age, these aircraft were flown by feel and instruments alone with no fly-by-wire control systems. Too many G's can easily rip the wings off a plane or cause a flameout. In the Soviet MiG 15, you can feel adverse yaw and tail blanking. Not only are the flight models accurate, but they really bring out the differences between the various aircraft.

Many flight sims take place in a strangely empty world, but not these award-winning sims. In Mig Alley you are flying in and also leading the UN air campaign in an unscripted simulation of all air and ground forces in the 1950 Korean war.



Also included is Battle of Britain. Playing either the British or the German side, you control all air assets in an unscripted campaign and also jump in to fly as desired. As with Mig Alley, which uses the same game engine, you can pick targets, manage logistics, create custom missions and assess intelligence, giving you insight into this period in history.

Flyable planes include the spitfire, hurricane, ME 109 E4, ME 110 and Stuka. Engine behavior and prop pitch are modeled, along with other aircraft systems.

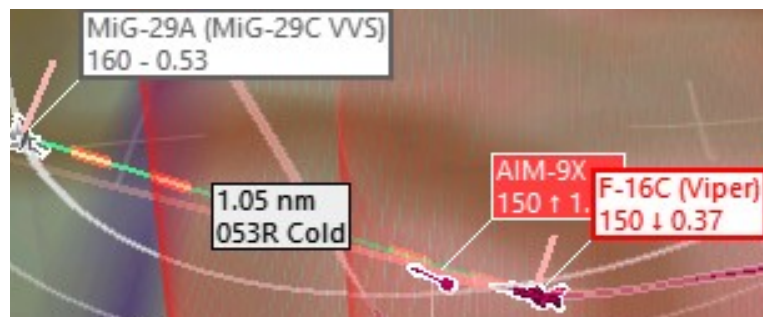


Mig Alley and Battle of Britain are good preparation for the most complex and enduring combat flight/war sim of them all, Falcon 4. The Free Falcon version is included with this package.

Manage the air war and fly for Egypt, Syria, Israel, Serbia, the UN, or any of the other combatants in the Yom Kippur War, the Six Day War, Lebanon Invasion or Balkans conflict.



DATACARD					
Package		Mission			
		TO Spec	13%	Int Fuel	7162
Gross Wgt	26762	Rotation	137	TO Fuel	6962
Drag ind	0	Refusal	148	Set Fuel	
ALOW	300	Mil Power	103 %	JOKER	
MSL	10000	Mil Climb	470/0.90	BINGO	1500
		Secondary			
		DMPI			
		Lat&Long			
3 =		4 =	5 =		6 =
SGUPAIR	SGL	AG INV PROF2 CCIP	Fuze	NOSE	SGUPAIR SGL
RP	1	MSL AD T. 00.00.00 SGL	AD	04.00	RP 4



One use case: games to accompany your daily workout

Science tells us that about an hour per day of aerobic exercise is recommended for health[1]

Problem: An exercise bike (or treadmill) is convenient but boring. How to find the motivation to keep exercising?

Solution: gamify your exercise hour with quality eSports and strategy games you can play while working out

[1]Greger, “How Not to Die”, Flatiron Books (2015)