

John Litborn

john.litborn@pm.me • Linköping, Sweden

20+programming side projects, 15 years linux experience, scored top 0.1% in Swedish SAT, participated in The Programming Olympiads and several other competitions

Experience

2013-17

Amanuensis, Course Assistant, Head Assistant

Linköping University

- Led lessons and lab sessions, advised on projects, and graded hand-ins and exams
- Taught courses in Python, C++, Ada, MATLAB, C++ STL, Git, OOP, and unit testing
- Performed light administrative and managerial duties for students and other assistants
- Improved tooling and workflow used by assistants

Summers of 2014–15

API & Course Developer

Linköping University

- Added features and fixed bugs in the interfaces between the C game client, the injection code used to run a game client automatically, and the Python API used by students
- Changed server–client netcode to send extra data, offloading and improving the client-side AI API
- Overhauled assignments and improved instructions and documentation

Mar–Oct 2017

IT Consultant

Ericsson

- Updated 4G base-station unit tests written in Erlang to work in a virtualized environment
- Supported core Linux and Git skills for other team members
- Wrote automation scripts in Python & shell

Education

2012–14, 2020–21

Computer Engineering

Linköping University

- 80 credits in programming courses with a focus on algorithm construction, optimization, low-level code, and hardware. Python, C++, C, Java, Ada, VHDL, Prolog, Assembly, GNU MathProg, Microcode.
- 40 credits in math courses; statistics, logic, discrete math.

Personal Project Highlights

Necro Score Bot

2015–present

- Pulls leaderboard updates from the Steam API for the indie roguelike rhythm game Crypt of the Necrodancer, posting notable scores to Twitter and Discord.
- Continuously running since 2015, six github contributors.
- 240 Twitter followers, 13.2k tweets, ~12.2k likes.
- Tags registered players and detects cheated or bugged scores, notifying the developers

Seat Exchange Game

May–June 2019

- Implements an adaptation of a game from a Korean game show, *The Genius*
- Supports 40 different commands, varying player counts, bot players, simultaneous games, and permissions

Both fully linted and typed, written in Python.

Merits

2011 Programming Olympiad, national qualifiers: tied for 31st / 164

2014 **MicroCode sorting competition** as part of a university course. Placed **1st** with an average runtime of 903.6 cycles, breaking the professors record of 948, and smashing the student record at the time. (>1100)

2015 Nordic Collegiate Programming Contest (part of ICPC): 9th/22 at our university, 108th/355 nationally.

2013 Mensa entrance test: IQ 135+ (top 1%).

2012 Swedish SAT: 2.0/2.0 (top 0.1%)

2016 **Swedish SAT**: 1.9/2.0 (top 0.2%), retook it for fun with a friend

Longer CV including a full list of my 20+ programming projects is available on my GitHub.