

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](#)** [1200 LOC] *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, ~12.1k likes.
 - Tags registered players and detects cheated or bugged scores, notifying the developers
- [Seat Exchange Game](#)** [2600 LOC] *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

[Complete CV](#) including a full list of my 20+ programming projects is available on my GitHub.