

**SYNOPSIS** I revere the indefinite complexity of the universe and the human mind. I am on a quest to understand neural networks and their silicon counterparts with an inquisitive passion for engineering and robotics and a strong admiration for the field of Computer Science as a whole. Understanding what gravity does is uninteresting. How and *why* – on the other hand, must be beautiful.

**PROFESSIONAL** **cthings.co sp. z o.o. sp. k.** *internet of things* *Jul 2017 - present*

## Chief Technology Officer

- key decision-maker for technology;
- team lead and project manager for a group of talented engineers;
- design, manufacturing and testing of embedded hardware;
- firmware integration for the said hardware;
- programming in embedded C/C++ and Python; and
- working with bleeding-edge technologies such as NB-IoT.

**Students Underwater Robotics Association** *Mar 2016 - present*

## Electronics Engineer

- pcb design and firmware for complex multi-microcontroller systems; and
- all-round mechanical integration and engineering.

**HostUS Solutions LLC** *web-hosting services* *2012 - 2013*

Systems Administrator *during the company's genesis*

**ACADEMIA** **Politechnika Warszawska**, Warsaw, PL *2015 – 2018*

*B.Sc., Computer Science GPA: 4.4/5.0 (two years completed)*

**PROGRAMMING** C (embedded/POSIX); C++; Python; Verilog; MATLAB; and Java.

**TECHNOLOGIES AND SKILLS** Altium Designer; Atmel Studio; NB-IoT; BLE; ARM; AVR; linux server management (nginx, OpenVPN, MySQL, etc.); Arduino; Espressif ESP; Raspberry Pi; 3D printing; component pick-and-place; solder reflow techniques; etc.

**NOTEWORTHY PERSONAL PROJECTS** **Elise** *control automation for ROVs and multirotors on embedded platforms* *ongoing*

- smart point-of-load power management pcb design;
- firmware for multi-microcontroller pcb;
- custom simple priority task handler RTOS;
- inertial PID controller design and firmware; and
- self-stabilisation and movement algorithms.

**Cortex** *fast and lightweight bitboard UCI chess engine in C++* *December 2014*

- Minimax with alpha-beta pruning and quiescence search;
- uses processor-native 64-bit integers, or 'bitboards';
- GCC's low level pre-built functions: incredibly fast move generation;
- search efficiency using heuristics such as MVV-LVA and null move pruning;
- Zobrist hashing and transposition tables for efficient search;
- Universal Chess Interface (UCI) GUI protocol supported; and
- future exploration of genetic evolution of evaluation.

**Neptune** *16-bit custom RISC microprocessor in Verilog*

*October 2013*

- originally designed on a Xilinx Spartan 6 FPGA;
- microcoded by hand atop a custom MIPS-like architecture;
- handmade serial display segments with custom protocols;
- human-readable instruction set; and
- intended to teach introductory assembly to fellow students.

NOTEWORTHY  
MISCELLANEOUS

**An Introduction to Interactive Programming in Python**

*November 2014*

*Rice University on Coursera, 100%*

INTERESTS

Artificial Intelligence; machine learning; behavioural psychology; philosophy; chess; writing; algorithmic, mathematical thinking; and curiosity with a passion

FEATURED  
BLOG POSTS

**The Singularity is Boring**

**The Egocentric Predicament: The Bad and the Atrocious**

LINGUISTICS

**International English Language Testing System (IELTS)**

*November 2014*

*Reading: 9.0 Listening: 9.0 Writing: 7.5 Speaking: 8.5 Overall: 8.5*

*Others: Hindi; Malayalam; and Marathi*

LINKS

LinkedIn [\*shreyasvinod\*](#)

PERSONAL

Born *19<sup>th</sup> December, circa. 1997*      Nationality *Indian*

INDENTATION  
PREFERENCES

*Two spaces, or matching an existing project.*