Shreyas Vinod

ul. Żeromskiego 1/133
01-887 Warszawa, PL

servertech **github**
+48 570 898 920 **phone**
https://shreyasvinod.xyz **web**
shreyas@shreyasvinod.xyz **email**

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 *19th December, circa. 1997* Nationality *Indian*

Indentation Preferences

Two spaces, or matching an existing project.