

Valentin-Ioan Vintilă

Dedicated, curious, creative and hard-working computer science student with solid experience in modern, **object-oriented C++**, low-level C and Python, knowledgeable in **advanced algorithms, numerical methods and computer architecture**, seeking a competitive and passionate team to be a part of as a software engineer.

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GitHub: github.com/w1bb

EDUCATION

- **2021-2025** Bachelor of **Science Degree**
Faculty of Automatic Control and Computer Science, University Politehnica of Bucharest
- **2020-2023** **High School** diploma
"Cantemir-Vodă" National College, Bucharest

TEACHING EXPERIENCE

- **since 2023** Analog Electronics **Lab Assistant** (Asst. Prof. Dumitru-Cristian Tranca)
Faculty of Automatic Control and Computer Science, University Politehnica of Bucharest
- **since 2023** Numerical Methods **Lab Assistant** (Prof. George-Pantelimon Popescu)
Faculty of Automatic Control and Computer Science, University Politehnica of Bucharest

HONOURS & AWARDS

- **Operating Systems Hackathon [2023]**
2nd place
- **Perpetuum [2023]**
Participation
- **EESTEC (10th ed.) [2022]**
2nd place @Side Challenge
- **EESTEC (10th ed.) [2022]**
Qualification @Main Challenge
- **Baliza (1st ed.) [2022]**
1st place (written in C)
- **National Olympiad in Informatics [2021]**
Participation
- **County Olympiad in Informatics [2021]**
2nd place
- **MateInfoUB - Informatics [2021]**
1st prize & pre-admission pass
- **MateInfoUB - Mathematics [2021]**
3rd prize
- **National Olympiad in Informatics [2020]**
Qualification * *event cancelled due to COVID*
- **County Olympiad in Informatics [2020]**
1st place
- **First Tech Challenge [2020]**
Innovation Award, 3rd place
- **First Tech Challenge [2019]**
Think & Design Awards, 3rd place
- **National Olympiad in Informatics [2018]**
Bronze medal

SCIENTIFIC CONTRIBUTIONS

- **Metode Numerice (book, 2023)**
A soon to be released book about **numerical methods**, written in Romanian.
The book will be **completely open-source** and will launch in late 2023.

NOTABLE PROJECTS

- WiParser** Oct. 2023

A parser combinator written in vanilla C++ 17. Functional programming concepts (*such as map, chain, flatten etc.*) have been introduced to aid parser development.
v-vintila.com/wi-parser
- Wi-Crypt** Sep. 2022

An object-oriented C++ implementation of the AES algorithm, allowing for 128, 192 and 256 bit encryption using ECB, CBC, CFB, OFB and CTR modes.
v-vintila.com/wi-crypt
- WiCE** Jun. 2021 → Nov. 2023

A single-threaded chess engine written in object-oriented C++ that allows the computer to beat opponents rated as high as 1800 ELO.
This project will soon be replaced by ADLE, a way more powerful chess engine written for the crazyhouse variant. Expected: Nov. 2023
v-vintila.com/wice
- Non-AI Spam detector (N-AI Spam)** Jan. 2022

An advanced heuristic-based spam detection algorithm written in C with a measured performance of $F_1 = 95.63\%$ on 2000's emails. The program won the Baliza challenge.
v-vintila.com/n-ai-spam
- v-vintila.com** Nov. 2022

A modern, responsive website designed from the ground up using HTML5, SASS (CSS3) and JS (jQuery), dedicated to publish my work.
v-vintila.com/v-vintila

ENGINEERING SKILLS

- C / C++** **Advanced**, acquired while working on my personal projects and by competing.
- OOP Concepts** **Advanced**, developed for my CS homework and personal projects.
- Python, Java** **Intermediate**, learnt for university and scripting.
- Linux** **Intermediate** user, daily-driving a Linux distribution since high-school.
- Web. Dev.** **Advanced** in HTML, CSS (SASS) and JS, proven by my personal website.
- Electronics** **Knowledgeable**, used KiCad to create an Arduino-like board from scratch.

PERSONAL SKILLS

- Leadership** Acquired while being a team leader for our high-school's FTC team, *MasterMinds*.
- Communication** Developed while teaching others numerical methods, electronics or just programming.
- Perseverance** Proven by the many competitions I have participated in, including national olympiads.
- Professionalism** Demonstrated by the attention to details found in my projects and their codebase.
- Altruism** Proven by the many open-source projects and free teaching that I have provided.