

# EMA-IOANA BĂNESCU

Github | LinkedIn | Gmail: [banescuema@gmail.com](mailto:banescuema@gmail.com)

Address: Bucharest, RO | Mobile: +40 0725026717

## EDUCATION

### University POLITEHNICA of Bucharest

*Bucharest, RO*

### Faculty of Automatic Control and Computers, Bachelor's Degree

*October 2023 - June 2027*

- Department of Computers and Information Technology
- Relevant coursework: Computer Programming (C), Data Structures (C), Object-Oriented Programming (Java), Numerical Methods (MATLAB), Applied Informatics (Python, Flask, Jinja, Docker, and various web technologies)

### Constantin Carabella National College

*Târgoviște, RO*

### High School Diploma

*September 2019 - June 2023*

**Specialization:** Mathematics and Computer Science.

**Academic Honors:** Merit scholarship for academic excellence, **GPA: 9,90/10.**

**Notable achievements:** Scored 10/10 in Mathematics on the National Baccalaureate Exam; 9.50/10 in Computer Science

## PROJECTS

### NIST Security Validator Application <https://github.com/banescuema101/NIST-security-validator>

- Created during participation in the MATH4ENG summer school, accredited by EELISA.
- The application uses four algorithms I implemented in Python to test the pseudo-randomness of the encryption keys used in cryptography. Each algorithm represents an implemented version of the statistical tests recommended by the National Institute of Standards and Technology
- The Graphical User Interface was developed using Tkinter module from the Python standard library.

### Photo management web app

[https://github.com/banescuema101/image\\_gallery\\_app](https://github.com/banescuema101/image_gallery_app)

- The website has both a front-end part, created using HTML, CSS, Bootstrap, and Jinja templating engine, as well as a back-end part built with flask. Also, I used Docker to ensure that the app runs consistently across different environments.
- The site features authentication functionality, with an HTML form, menu links, and associated Flask routes. It supports admin authentication for file upload permissions, allowing users to see an unauthenticated front page displaying all uploaded images. After logging in with a specific username and password, users are redirected to an authenticated page with an image upload form and related Flask functions.

## CERTIFICATIONS

### CCNA 1

**Web101 (HTML, CSS, and JavaScript basics)**

*Cisco Networking Academy*

*Hackademy, UPB*

## SKILLS AND INTERESTS

### Languages:

Romanian: Native, English: Fluent, French: Beginner

### Technical:

C (Advanced), Python (Intermediate), Flask (Intermediate), Java (Intermediate), MATLAB (Beginner), Tkinter (Intermediate), HTML, CSS (Intermediate), JavaScript (Beginner), Bootstrap (Intermediate), Git (Advanced)