FOIDAȘ ANDREI-ȘTEFAN

SOFTWARE ENGENEERING STUDENT

○ DETAILS ○

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○ LINKS ○

https://www.linkedin.com/in/andrei-stefan-foidas/

https://github.com/AndreiFoidas/Projects

○ PROGRAMMING LANGUAGES ○

Java, Python, C/C++, SQL, C#, Kotlin, HTML/CSS, Javascript, Typescript, PHP, Shell, NASM

○ TOOLS ○

Bash, Git, Google Cloud Services, AWS, VMWare, MATLAB, JetBrains tools, Visual Studio suite, Microsoft Office

○ SOFT SKILLS ○

Team spirit, Problem solving, Focused on quality, Detail oriented, Flexibility, Adaptability and Fast learning

Proficient written and oral communication (conciseness, accuracy, clarity), Assertive attitude, Good listener

○ LANGUAGES ○

Romanian

English – C1

EDUCATION

University - Babeș-Bolyai, Faculty of Mathematics and Computer Science, Cluj-Napoca
October 2022 — Present
Masters of Software Engineering in English

University - Babeș-Bolyai, Faculty of Mathematics and Computer Science, Cluj-Napoca
October 2019 — July 2022
Bachelor of Science in Computer Science in English

WORK EXPERIENCE

TVARITA SRL - Internship, Cluj-Napoca
July 2021 — August 2021

- Worked in a team of two members to research and create a method to automate the Google login process, including Two-Factor Authorization with audio calls.
- Used **pyautogui** to control the mouse and keyboard simulating a real user and **openCV-python** to get the coordinates to where on screen it needs to go using Image Recognition.
- Ported the app on an **Ubuntu Virtual Machine** in favour of using **Xvfb** for running the application simultaneously on various virtual displays.
- Intercepted the audio calls using a SIP client and converted the audio files using **pydub** and **ffmpeg**.
- Used **Google's Speech-to-text API** to transcribe the audio calls in order to extract the code needed for Two-Factor Authentication.

PROJECTS

Mobile Application for Classifying Plastic Recycling Symbols Using Image Classification and Optical Character Recognition| Bachelors Thesis 2022

- Created an Android mobile app in **Kotlin** that classifies user-uploaded images into the seven main plastic types.
- Created a server using **Flask** to intercept the photos and process them using tools from **Tensorflow2**.
- Combined two enhanced image classification models (based on pre-trained models — **VGG19** and **EfficientNet-B7**) with an OCR algorithm (based on **Google's Vision API**) using a weighted version of the sum rule-based fusion method.
- Modified the pre-trained models (suing data augmentation, k-fold cross validation, fine-tuning, and sum-based fusion) to increase the accuracy and reach 58% on a custom testing dataset, containing 50 images that closely resemble user input data.
- The app doubles as a way to collect labeled photos from its users — the gathered images can be used to increase the dataset, improving the accuracy.

Football Manager in Java | 2021

- Implemented a CRUD **Angular** application in **Java** using **Spring** that manages football teams and can also assign players to matches and teams and filter entities on various criteria.

Toy Language Interpreter in Java | 2020

- Implemented a multi-threaded toy language interpreter in **Java** using a layered architecture (**MVC**).
- Created a GUI using **JavaFX** and **SceneBuilder**.

VOLUNTEERING

Volunteer - "Societatea Hermes" Association | March 2020 - present

- Volunteering in the External Relations department where we are searching and obtaining sponsoring and partnerships from various companies and shops.
- Maintaining a good relationship with other volunteering organizations as well as helping in organizing public events of large scale.

Volunteer - "Student to Student Team" | September 2020 – June 2021

- Mentored a group of 1st year students together with a few colleagues and organized meetings once every 2 weeks with specific themes for discussion or fun activities for networking purposes.