Ing. Jelle Meeus
Software Developer

Last update: August 2, 2022

The online version is available at https://jellemeeus.github.io/JelleMeeus.github The online version is available at https://jellemeeus.github.io/JelleMeeus.github

Location
2580 Putte

Email
jelle.meeus@hotmail.com

Language
Dutch (native), English (fluent), French (intermediate)

Driver's license
B

Website
https://jellemeeus.github.io

Python	+++	Git	+++	Javascript	++	VIM	++	Linux	++	Java	++
CI/CD	++	C/C++	++	PL/SQL	++	8051 ASM	++	React	++	C#	++
Docker	+										

Education

Master in de industriële wetenschappen, elektronica-ICT 2018
Katholieke Universiteit Leuven - Campus De Nayer - Sint-Katelijne-Waver

Thesis - Continuous Unobtrusive User Authentication Using Gait For Wearable Devices, Utilising Machine Learning Algorithms

Text PDF Powerpoint Slides PDF

In recent years, much research has been done to find new authentication methods that try to avoid explicit input from a user. This teChniques use patterns and biometrics from a user to recognize machine learning models. One of these biometrics is the way a person walks. It can be captured by sensors on a smartwatch or smartphone, easily and unobtrusively. I researched a new feature-extraction technique to allow traditional machine learning models to recognize walking activity and recognize gait in a fast and accurate way. I developed a server application (Python) to process gait data and train models. I implemented a wearable application (Android) to record data and run inference of said trained models in real-time.

Machine Learning · Biometrics · AI · Python · Java · Android

8051 Microcontroller Instruction Set IEEE754 32bit Floating-Point Library

Implementation of a IEEE754 Floating-Point library on the aduc832 system platform for 8bit 8052 based systems. The library allows for correct and fast calculation of the 4 basic operations (+,-,*,/) for two numbers in IEEE754 32b without using MUL/DIV instructions.

source · ASM · 8051 · aduc832 · IEEE754

Work Experience

Machine Learning Algorithms Student

OneSpan 4 weeks summer 2017

Developed a demo allowing recording and analysis of gait data on an Android wearable device

Machine Learning · Biometrics · AI · Python · Java · Android

Junior Software Engineer Consultant

Sioux Embedded Systems Nov 18 - Feb 19

I wrote tools accommodating a customer's migration from a Perforce Version Control System (VCS) to Git. I implemented existing and new features using Python and Gitlab API to meet in-house developer demands. I setup a R&D Internal website (Bootstrap) to provide an overview of projects that updates nightly. I did smaller IT related tasks, such as setting up automated backups of firewall settings and Jenkins configurations. Also, I wrote some automated tests in an in-house testing framework.

Python Git Perforce Docker

Hobby projects

Drawing Cards Demo Here

A card drawing web app created with React hosted in github pages. Create and interact with a deck of French-suited SVG rendered cards. You can draw one or multiple cards, shuffle, flip over the deck. All neatly displayed through React with a status bar, menu bar and mouse over interaction.

source React Javascript

Bomberman Play Here

Example of a 2D Classic Bomberman game made with godot. You can play as a bomb laying bunny and walk around a maze to reach a carrot and try not to blow yourself up in the process.

source C# Godot

Twitch Compilations From Cluster Data

Create Twitch compilations and upload to Youtube with ease. Find clips by creators, clip ids, clip urls, game ids, category name, or a cluster based off Twitch Atlas.

source Python Javascript React ElectronJS Twitch API Youtube API

Home Media Server

docker-compose.yml for a home media server stack: transmission (+ openvpn), jackett, radarr, sonarr, lidarr, calibre, calibre-web, plex, soulseekqt

source Docker

Automated Local And Cloud Backups With Cronjobs

Easy automated backups to local and remote drives with cronjobs, rsync and rclone. We can specify which files to upload with filters (*.txt) and easily upload to multiple cloud drives with variable data cap limits.

source crontab GNU/Linux rsync rclone