

# Michał Kucharz

Curriculum Vitae

github.com/chromatic-aberration

michal.ku@op.pl

+48 731 844 961

## PROFILE

### Place and Date of birth:

Krakow, Poland, 05.10.1997

### Address:

ul. Spokojna 21/9  
30-054 Kraków

### Languages:

Polish: Native  
English: C1

### Availability:

Full time

## STUDIES & WORK

### Mikołaj Kopernik Brzesko High School 2013-2016

profile: Mathematics - IT - Physics

### AGH University of Science and Technology

F. of Physics and Applied Computer Science 2016-2017

major: Applied Computer Science (polish)

F. of Computer Science, Electronics and Telecoms since 2017

major: Electronics and Telecommunications (english)

### Internship: FUH Climax Rafał 2017

Fibre optics installations, computer repairs, installing and configuring home networks.

## SKILLS

### Python3: Advanced

### Python2: Intermediate

### C/C++: Intermediate

### SQL: Intermediate

### AVR assembly: Beginner

### Additionally:

Git, Agile, REST API, MQTT, Websocket,  
Linux, multimeter and soldering

basic knowledge: embedded systems  
(experience with Arduino, Raspberry Pi  
Pico (ARM) and FRDM-KL05Z - Cortex M0+),  
electronics, networking, MATLAB and  
Adobe Photoshop

## PERSONAL PROJECTS

### Chat Bot (Python)

Bot using Discord web communicator's API, contains  
variety of commands and features such as interactive  
multiplayer Uno game. Utilising i.e.: asyncio, sqlite, logging,  
json, requests and pillow.

### ARM Space Invaders (C)

Custom version of retro game Space Invaders. Written for  
FRDM-KL05Z microcontroller with video output via SPI  
interface. Controlled using Python script on pc communi-  
cating with the board using UART over USB.

### MQTT Smart Home (Python, JS)

Network of IoT devices communicating with each other  
using MQTT protocol. Web Interface (using JQuery)  
running on Raspberry Pi with monitoring and control of  
connected devices, like programmed with MicroPython  
Raspberry Pi Pico or Python program acting as additional  
clients with paho-mqtt library.

### Chess & Checkers (C++, Java)

C++ CLI chess, later rewritten to Java with GUI using Swing.