

# Antoni Wiciński

## Personal data

### Date of birth

12.05.1995

### Phone

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### E-mail

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### WWW

<https://github.com/Antua>

<https://ownti.me/portfolio>

<https://linkedin.com/in/antua/>

## Skills

### C++



7 years experience, preferred language

### Linux



Using Arch Linux daily.

### Java



4 years experience

### OpenGL



Two own 3D graphical projects.

### HTML, PHP, JavaScript, MySQL



If important, I can quickly educate myself.

## Languages

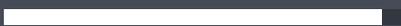
### English



Level B2+

## Software

### GCC & GDB



Sometimes preferred over IDE

### Visual Studio



Main IDE when I use Windows

### GIT



Used by default when coping with others in projects

I started programming over 7 years ago and was gaining experience ever since. And although my university was demanding in terms of time, as until now I prioritized my education over work, I managed to develop few ever larger projects in my spare time. But currently I would like to move this focus to real-life work, so that I could use my skills to help people and make their lives easier. I would be happy to present my own projects if asked for it, as most of those projects are not published.

## Experience

2016.07 - **Bell Labs at Nokia Solutions and Networks**



2016.10 **Sp. z o.o., Wrocław**

### Working Student

Help with development of simulation tool used in research and development of 5G mobile network. Project:

- C++11
- More than 300k lines of code
- Over 50 co-developers (Worldwide) with weekly meetings
- Jira/GIT/Fisheye and other tools used extensively
- Testing on many different levels: unit tests, functional tests
- Continuous integration methodology (Jenkins)
- Features implementation and Optimization off existing code

Unfortunately I wasn't able to extend my contract because I wanted to focus more on my full time studies, but those end soon.

## Education

**Wrocław University Of Technology Fundamental Problems of Technology Faculty, Computer Science**



**Master's in Computer Science**

Specialization Algorithmics

2018.02 -

currently

**Bachelor's in Computer Science**

Bachelor's defense: 5.0

2014.10 -

2018.02

## Projects - Own experience

Because of my general interest in computer science school was not sufficient to satisfy the need for knowledge. For this reason, various projects emerged that just fell into my head. They have become a kind of challenge which I could face. Starting from simple text games like "snake" or algorithms achieving super-human results in various games like "2048" through various mobile applications and websites, to larger projects in 3D graphics. At this point I just implemented the client-server model in my current project and I'm going to develop it as a Reinforcement Learning environment. Some time ago I started a website about me and some of my projects so you can find more on the website <https://ownti.me>.

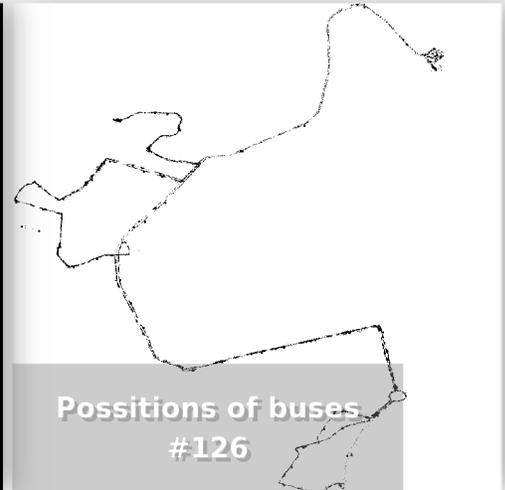
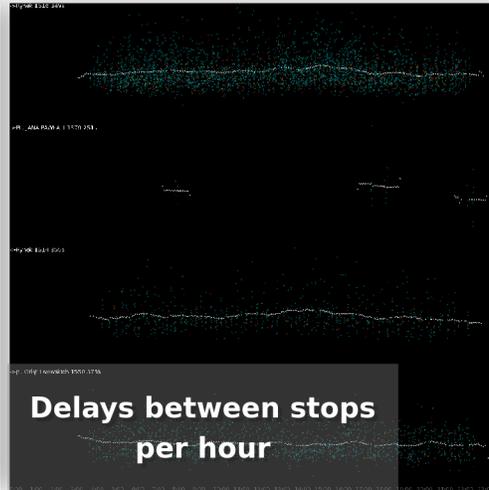
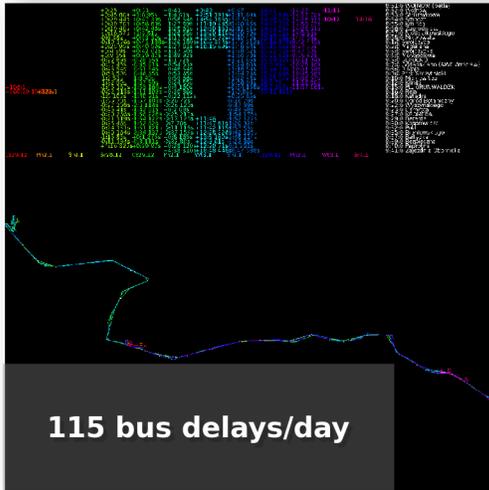
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## Results of some of my work

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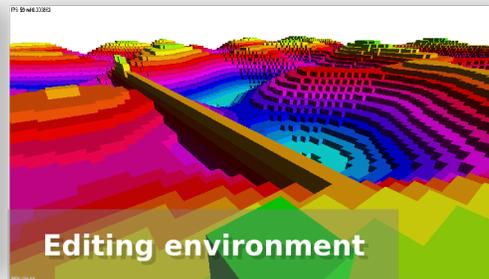
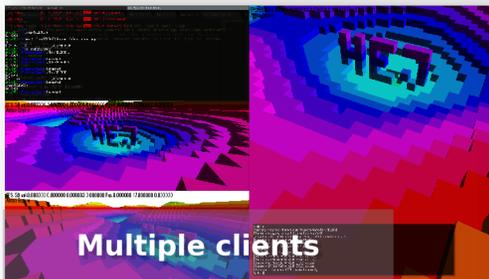
I implemented a subsystem that collects and processes real-time positions of public transport in my city (Wrocław). This was used to predict the fastest routes from A to B taking into account things like traffic jams, rush hours etc. This was a 3-team project, one of which I was a leader. On the left we can see visualized times of travel between (vertical axis) "PL. JANA PAWŁA II" and its 4 possible next stops, through the day. In the middle I plotted all collected positions of bus line 126 which creates nice map of its routes. On the right we see specific course of line 115 through few days and corresponding arrival times (colored +-numbers). You can find public repository of this project on my pinned [github.com/Antua](https://github.com/Antua) repos (Owntime).



Next project which was the most challenging (yet) is my Reinforcement Learning 3D environment. Some of the things that this project implements or is using at the moment:

- client-server architecture,
- 3D OpenGL graphics,
- basic physics,
- c++17,
- efficient and safe memory management,
- MySQL,
- CMake.

This project emerged when I wanted to test my ML/neural networks/RL ideas and I couldn't find complex enough environment. As I had previous experience in 3D OpenGL graphics I used it to create procedurally generated environment in which I then could simulate agents controlled by neural networks. I was able during that project to learn and test my skills a lot. Some of those were: memory leak detection, writing client-servers protocols based only bare bytes, 3D transformations, efficient 3D graphics displaying, some physics, source code architecture designing and a lot more. If asked to I may prepare the code for the interview to show you everything but I won't make it public or send it. Click images to enlarge if in \*.pdf.



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## Interests

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Efficient Algorithms, Artificial Intelligence, Neural Science, Brain biology, Deep Reinforcement Learning

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## Conferences

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2014-17      Code::Dive 2014/5/6/7

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