

Ruben van Nieuwpoort

Software developer

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q rubenvannieuwpoort.nl



About me

Analytic with a broad interest in technical topics. Passion for learning and teaching. Thrives when working in a small, multidisciplinary team in a stimulating environment.

Skills

Technology Proficient in C, C++, C#.NET, Python. Experience with assembly

languages (x86, ARM, TriCore).

Frontend Experience with HTML, CSS, JavaScript, TypeScript, various

frontend frameworks (Vue, Angular, React), and Azure.

Hardware Familiar with VHDL, and communication protocols like UART, and

SPI.

Work history

April 2023 - Current

Infi, Utrecht

Software developer

Infi is a software consultancy company that makes apps and web applications.

Sep 2020 - Dec 2022

Optiver, Amsterdam Software developer

Optiver is a high-frequency trading firm operating worldwide.

Compliance tech

The compliance tech team develops and operates applications to automate and assist with compliance tasks, including recordkeeping, surveillance, and reporting.

- Set up a new SFTR reporting pipeline for a new clearing bank
- Developed a new application to detect trades in sanctioned instruments

Options research & data

The options research and data team is responsible for the data used by research and trading. In particular, I was responsible for a distributed high-throughput system that calculates trade metrics, which are heavily used by trading and research to analyze trades.

Jun 2019 - Aug 2020

Altium TASKING, Amersfoort

Software developer

TASKING develops tools for programming for embedded systems.

- Worked on a C compiler for the ARC architecture
- Set up an automated framework to find compiler bugs
- Implemented a framework for monitoring the test coverage

Oct 2017 - May 2019

Betabit, Utrecht

Junior consultant

Worked at various client as a software consultant.

Insurance company

Worked in a multidisciplinary team of actuaries and programmers on the implementation of a model for market value projection.

- Reduced runtime of shadowmodel tests from 30+ minutes to less than a minute, greatly improving the efficiency of the team
- · Teached various programming topics to actuaries

Electronics retailer

Worked on the product management system. I helped users and led the technical side of the transition to a new product information supplier.

Apr 2013 - Nov 2014

Utrecht University, Utrecht

Teaching assistant

Worked as a teaching assistant for several courses for the Mathematics and Computer Science curricula. Responsibilities included instructing students and grading homework and lab assignments.

Education

Sep 2016 - Dec 2017

TU Delft and Maxeler Technologies

Master thesis: "Solving Poisson's equation using dataflow

computing'

Implemented an experimental finite element implementation on an FPGA using Maxeler's high-level synthesis framework.

Sep 2014 - Dec 2017

TU Delft

MSc Applied Mathematics

Sep 2014 - Dec 2017

MSc Computer Engineering

Sep 2011 - Jul 2014

Utrecht University BSc Mathematics

Sep 2010 - Jul 2014

Utrecht University BSc Computer Science

Sep 2004 - Jun 2010

Christelijk Gymnasium Utrecht

Pre-university education

Other

Apr 2018 - Sep 2018 New Dutch Connections, Utrecht

Voluntary work

Jan 2014 - Jun 2014 UC Santa Barbara, Santa Barbara

Exchange program

Hobby projects

Botzilla

https://github.com/rubenvannieuwpoort/botzilla

Botzilla is a bot that plays "Barrage Stratego". It uses Monte Carlo tree search to determine its moves.

Vulture

https://github.com/rubenvannieuwpoort/vulture

Reals

https://github.com/rubenvannieuwpoort/reals

Reals is a Python package for arbitrary-precision arithmetic that is designed to be easy to use. It can evaluate mathematical expressions with high accuracy.

Hobbies

Athletics, bouldering, climbing, playing the drums. Tinkering with operating systems, software, and electronics. Mathematics, reading, writing.