Quirijn Bouts

Software Engineer
IMC Trading

About Me

I am a passionate software engineer with a broad interest and skill set. My education and PhD have provided me with a strong background in algorithms and excellent problem solving skills. My experience in education and various leadership positions has given me the communiction skills needed to explain complex problems and work together to find the optimal solution.

Experience

- **Algorithms**
- **Design Patterns**
- **Agile (SCRUM / SAFe)**
- **Test-Driven Development**

Main Technologies

- **C++11 to C++20**
- **Python**
- **Unix/Linux**
- **Git, Jenkins**

Contact

- **Email:** info@qbouts.com
- **Website:** www.qbouts.com

- **Nationality:** Dutch
- **Languages:** Dutch & English

Experience

IMC Trading — 2023 - Present

Software Engineer Execution

IMC Trading is a globally leading market maker. As part of 'Execution', I work on the nanosecond performance needed to ensure we get the trades we want. By closely collaborating with trading and research I ensure short feedback cycles and rapid development of new features, allowing IMC to respond to changes in an evolving market. Additionally, as a lead engineer, I provide technical leadership as well as continuous feedback to my team members, helping them grow and excel.

ASML — 2018 - 2023

Software Engineer (2018-2021), Architect (2021-2022), Cluster Architect (since 2022)

Metrology Department

ASML is the largest supplier in the world of photolithography systems for the semiconductor industry. Simply put: ASML makes machines to 'print' computer chips. As a "Function Cluster Architect", I am reponsible for the high-level design, quality of deliveries and roadmap of one of ASML's function clusters. This "cluster" of teams (combination of on-prem and outsource) together work to implement one of the main optimization systems that allow ASML's machine to do the measurements that are needed to work at a nanometer scale.

Next to safeguarding the quality of deliveries and ensuring they are future-proof, I consider coaching of the team-level architects in both software engineering as well as domain knowledge, to be one of my core responsibilities.

I have received multiple 'excellent' yearly performance reviews (=top 5%) and also set up, organized and presented at the "C++ for lunch" initiative from 2020 to 2021. The initiative involved bi-weekly talks about various C++ software engineering topics and was regularly attended by roughly 100 employees.

PhD Candidate: Eindhoven University — 2013 - 2017

Applied Geometric Algorithms Group - Promotor: Prof. dr. Bettina Speckmann

Research Area: My research was in the area of computational geometry, which is a branch of algorithms focusing on problems which can be expressed in terms of geometry. To put it simply: if your data has coordinates associated with it, then you can use geometric algorithms to process it.

PhD Council: I was a member of the PhD Council in 2015 and 2016. During that time I organized several workshops and events
Jury of the BAPC: I was a jury member of the Benelux Algorithm Programming Contest (BAPC), a preliminary for ACM International Collegiate Programming Contest

Education

Master Computer Science and Engineering
Eindhoven University (Honors, Cum Laude) — 2011 - 2013

Other

BitsOfQ YouTube channel — 2021 - present

I run the BitsOfQ YouTube channel for which I regularly create advanced C++ and software engineering tutorials. (https://bitsofq.com)