

TONY MOWERS

Software Engineer & Data Scientist



Contact Information

Tony Mowers
Dorfgasse 36
CH-2514 Ligerz

Email: tony@alika.ch
Phone: +41 79 823 58 55
website: www.alika.ch

Nationality

Swiss and Canadian

Education

Bachelor of Applied Mathematics
University of Waterloo, Canada

Data Science Studies

University of Neuchatel and Coursera (ongoing)

- Machine Learning
- Multivariate Analysis
- Inferential Statistics
- Data Visualization
- Business Analytics
- Scala Programming

Work Experience Summary

1989 to Present

- Founder of software consultancy company
- Architect of several products
- Mentor and team lead for several engineering teams
- Mentor for several company level change initiatives
- J2EE, C#/.NET and HTML enterprise applications
- Machine learning based commodities trading
- Architect of IoT solution for SaaS transit application
- Embedded software for transit/telecom equipment
- Network management software for telecom
- Desktop CASE tools for C++ and business processes
- Co-founder of open-source modelling tool

Preferred Programming Languages

- Java
- Python
- C#
- Javascript es6
- Scala
- C++

Methodology Competencies

- SCRUM Product Owner
- SCRUM Master
- Kanban Boards
- Rational Unified

Patent Related Work

- Dependency management in embedded software
- Behavioral driven testing for VOIP systems

Teaching Experience

- Iqnite Conference: Continuous Improvement
- Iqnite Conference: Domain Languages for TDD
- Agile Practices, Story Writing, XP Programming
- Data Science
- C++ and Distributed Application Development

2004 - Present

Senior Software Architect, Data Scientist and Owner
Alika Analytics AG -- Ligerz, Switzerland

In my role as a consultant I am regularly hired to lead software engineering projects and/or implement complete solutions. A major component of that work is mentoring engineering team members.

For the companies which specialize in building software products I've been contracted to review engineering practices, recommend process improvements, and mentor engineering improvements.

I have helped lead major engineering change initiatives for companies such as: *Informatica*, *DRW Trading* and *Clarus IPC*. For example, at Informatica I mentored a process improvement project at the program level which consisted of about 400 software engineers.

Summary

- Guided several client software engineering improvement initiatives
- Mentored several engineering teams on Agile practices
- Assisted clients with management of outsourced projects
- Established quantitative trading team for Wall Street commodity firm
- Implemented machine learning and portfolio management algorithms
- Designed/implemented many client applications (web/database/client-server)
- Designed/implemented point-of-sale systems for retail stores
- Analyzed, automated, and instrumented client business processes

1998 - 2003

Senior Software Architect, Team Lead and Consultant
Self-employed -- Berkeley, California

As a freelancer I was frequently contracted to lead engineering teams and help startup companies to design/implement/deliver new products and product prototypes.

Summary

- ClarusIPC: lead engineering change initiative and presented to VC investors
- NextBus: architect SaaS passenger information and transit operations platform
- NextBus: firmware developer for devices on transit vehicles
- ClarusIPC: architect/team-lead, enterprise VOIP testing product web application
- NightFire: architect/team-lead, enterprise DSL provisioning GIS application
- WindRiver: architect/team-lead for desktop IDE product

1995 - 1997

Software Architect and Team Lead

Wind River Systems -- Alameda, California

Lead usability improvement initiative for WindRiver's Tornado 2.0 Desktop IDE.

Summary

- Architect/team-lead for desktop IDE for embedded applications
- Implemented component dependency management tool
- Team greatly improved out-of-box experience for the product

1994 - 1995

Software Architect and Technical Trainer

TCSI -- Berkeley, California

Travelled to customer locations to deliver courses in distributed application development and helped review designs for network management products.

Summary

- Implemented distributed telecom network management applications
- Taught telecom software engineers distributed application design

1989 - 1994

Member Scientific Staff

Bell Northern Research -- Ottawa, Canada

This was my first major software engineering position and it was on what was at the time the world's largest realtime software engineering project (4000+ engineers developing the DMS 100 telecom switch).

Summary

- Developed embedded software for telecom switching devices
- Provided architecture guidance for software project