Andrey Trebler

Curriculum Vitæ

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Personal Information

Date of birth *05/04/1986*
Citizenship *Norwegian*
Marital status *Married*

Key Qualifications

Software development; mathematical modeling and numerical calculations; simulation software and real-time simulators; computer graphics

Work Experience

01/2019… **Full Stack Developer**, *eDrilling AS*, Stavanger, Norway.
Architecture and development of microservices, RESTFul APIs, web applications for oil and gas industry with cloud deployment

- Backend: `C++17/Qt`, `Go`, `TypeScript/Node.js (ES2020)`, `Python`
- Frontend: `TypeScript/Vue.js`, `TypeScript/React`
- DevOps: `Docker`, `Kubernetes`, `Azure`, `AWS`
- Technologies: `OpenAPI`, `Redis`, `RabbitMQ/AMQP`, `WebSockets`, `Traefik`, `Keycloak`

10/2016–01/2019 **Full Stack Developer**, *timeanddate.com*, Stavanger, Norway.
Development of numerical algorithms, APIs, and software for astronomical simulations

- Backend development (in `C99`) of internal and external APIs providing astronomical data
- Frontend development (in `JavaScript` using `D3` and `three.js` frameworks) of browser-based applications for astronomical visualization. `ECMAScript 5`, `CSS/SASS` and `HTML5`

03/2016–10/2016 **Software Engineer**, *Steinsvik*, Førresfjorden, R&D Department.
Development of software for fish farming industry

- Development (frontend and backend) of cross-platform software for camera control and monitoring at fish farms in `Qt/QML` and `C++11`
- Support of existing software implemented in `NI LabVIEW`

12/2013–02/2016 **Simulator Systems Analyst**, *MHWirth*, Stavanger, Simulators Department.
Development of real-time simulators for oil and gas industry

- Development of mathematical models for equipment simulation
- Control system software implementation
- HIL testing of control system software

06/2010–06/2013 **PhD Research Fellow (*doktorgradsstipendiat*)**, *University of Oslo—UiO*, Oslo, Department of Geosciences, Section for Meteorology and Oceanography.
Research on project *Sources of Greenhouse Gases in East Asia (SOGG–EA)*

10/2007–01/2008 **Software Test Engineer**, *ABBYY*, Moscow, Mobile software testing group.
Gray-box testing of applications for Symbian and Windows Mobile mobile operating systems

Education

06/2010–06/2013 **PhD Program in Atmospheric sciences**, *University of Oslo—UiO*, Faculty of Mathematics and Natural Sciences, Department of Geosciences.
Section for Meteorology and Oceanography

10/2008–05/2010 **PhD Program in Mathematical Modelling, Numerical Methods and Programming**, *Lomonosov Moscow State University*, Faculty of Computational Mathematics and Cybernetics.
Department of Nonlinear Dynamical Systems and Control Processes

09/2003–06/2008 **MSc in Applied Mathematics and Computer Science with speciality Mathematician, System Programmer**, *Lomonosov Moscow State University*, Faculty of Computational Mathematics and Cybernetics, GPA: 4.47 (out of 5.0).
Department of Nonlinear Dynamical Systems and Control Processes

Programming skills

GNU/Linux, MacOS, Windows

Programming	TypeScript/JavaScript (ES2020), Node.js/Deno, Go, C99, C++17, Bash, HTML/CSS/SASS
Frameworks	Qt, Vue.js, Angular, React, three.js, D3.js, express.js, Bulma/Bootstrap
DevOps	Docker, Kubernetes, AWS, Azure, DigitalOcean, GitHub Actions, Jenkins
Bug tracking systems	Jira, TFS, Redmine, GitHub
Technologies	Redis, RabbitMQ, AMQP, OpenAPI/Swagger, NGINX/Traefik/HAproxy, WebSockets, OAuth 2.0, Keycloak, WebGL, JSON-RPC

Languages

Russian	Native	
English	Advanced	*IELTS 7.5 (L: 7.5; R: 8.5; W: 7.5; S: 7.0) ∼ C2*
Norwegian	Intermediate	*Norskprøve 2 (A2)*

Hobbies

IT, science, reading, chess, astronomy, table tennis, squash, volleyball, badminton, cars

Select Publications

[1] **A. Trebler**, R. L. Thompson, and S. Eckhardt, Estimating Primary and Secondary Sources of Persistent Organic Pollutants Using Inverse Methods, *Atmospheric Environment*, 2013–2015.

[2] **A. Trebler**, A. Stohl, and P. Seibert, "Identification of Greenhouse Gas Emission Sources Using Analytical Inverse Method," in *Algorithmic Analysis of Unstable Problems: Abstracts of the International Conference Dedicated to the Memory of V. K. Ivanov*, Institute of Mathematics and Mechanics, Ural Branch of the Russian Academy of Sciences, Ekaterinburg, Russia, 2011, `http://aanz.imm.uran.ru/aanz/AANZ-2011-final.pdf`.

[3] **Andrey Trebler**, On Cascades of Bifurcations Leading to Chaos in Several Nonlinear Dissipative Systems of ODEs, *Communications in Nonlinear Science and Numerical Simulation*, vol. 15, no. 10, pp. 2974–2986, 2010, doi: 10.1016/j.cnsns.2009.11.019.

[4] **Andrey Trebler**, A Transition to Chaos in Rucklidge Model of Double Convection, in *CIMCA '08: Proceedings of the 2008 International Conference on Computational Intelligence for Modelling Control & Automation*, 2008, IEEE Computer Society, pp. 952–957, doi: 10.1109/CIMCA.2008.46.