# Andrey Trebler

Curriculum Vitæ

Vestre Helleveien 5B
4318 Sandnes
Norway
□ +47 45100719
☑ treblera@gmail.com
in andreytrebler
♀ trebler



#### 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 / Cloud Architect, eDrilling AS, Stavanger, Norway.

Team lead for Product Development. Design and development of (micro-)services, RESTFul and WebSocket APIs, web applications with Kubernetes deployment (cloud/on-premise)

- o Backend: TypeScript/Node.js (ES2020), Go, Python, C++17/Qt
- o Frontend: TypeScript/Vue.js (2/3), TypeScript/React
- o DevOps: Docker, Kubernetes, Azure, AWS
- o Technologies: Redis, RabbitMQ/AMQP, WebSockets, OpenAPI, Traefik, Keycloak, Azure AD

10/2016–01/2019 Full Stack Developer, timeanddate.com, Stavanger, Norway.

Development of numerical algorithms, APIs, and software for astronomical simulations

- o Backend development (in C99) of internal and external APIs providing astronomical data
- o 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
- o 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

- o Development of mathematical models for equipment simulation
- o Control system software implementation
- o 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

 $10/2008-05/2010 \ \ \textbf{PhD Program in Mathematical Modelling, Numerical Methods and Program in Mathematical Metho$ 

**gramming**, 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, esbuild, webpack

## Languages

Russian Native

English Advanced

Norwegian Intermediate

IELTS 7.5 (L: 7.5; R: 8.5; W: 7.5; S: 7.0)  $\sim$  C2

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.