

Arjan de Bruijn
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SUMMARY OF QUALIFICATIONS

- Fluent in most coding languages
- More than 8 years of experience in software development and GIS
- Developer of efficient code
- Hard-working
- Authorized to work in the USA
- Background in Bayesian and probabilistic statistics
- Spatial stochastic and deterministic biogeochemical simulation models
- Experienced in public speaking at international conferences and workshops
- Excellent communication, teamwork and problem solving skills
- Proven initiative in new approaches to forest demographic models
- Proficient in written and spoken English, German and Dutch

SOFTWARE EXPERTISE

- | | | |
|-----------------|---------------|---------------------------|
| • C# | • Python | • GIMP |
| • C++ | • R | • FireBird |
| • Visual Basic | • Matlab | • SQL |
| • HTML5 | • TortoiseSVN | • Microsoft Office family |
| • CSS | • SPSS | |
| • JavaScript | • Inno Setup | |
| • Visual Studio | • ArcGIS | |

SOFTWARE TECHNIQUES

- Data manipulation and performance bottlenecks
- Multi-threading/Background worker in Visual Studio 2010
- Developer of efficient code
- Embedding COM components in Visual Studio 2010 (i.e. MapWinGis ActiveX API)
- Application Extension (i.e. ARCGIS plugin)

PROFESSIONAL EXPERIENCE

SELF EMPLOYED (Harvard Forest)

September 2015- present

Research associate

• I have been working with the United States Forest Service since 2011 (i.e. during my Post-Doctoral assignment at Purdue University). I received funding from USFS to finish up on some of my work after my contract at Purdue ended in September 2015. This contract will be executed concurrently with my work for the United States Forest Service (i.e. see next entry).

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PURDUE UNIVERSITY - West Lafayette, IN

2011- 2015

Post-doctoral Fellow

Purdue University, posted at USDA Forest Service Northern Research Station, Rhinelander, WI

• Developed a new spatially explicit simulation model, “PnET-Succession”, with user interface to simulate growth and spread of tree species and associated forest carbon sequestration.

AGROSCOPE RECKENHOLZ TAENIKON – Zürich, Switzerland

2010-2011

Post-doctoral Fellow

Agroscope Reckenholz-Tänikon Research Station, Zürich, Switzerland

• Simulated biomass and carbon dynamics in lowland grasslands in Switzerland.

ALTERRA B.V. – Wageningen, Netherlands

2009-2010

Alterra B.V. is a research station specializing in animal population dynamics, agriculture, and sustainability with close ties to my alma mater, Wageningen University.

Software developer

Alterra B.V. Research Institute, Wageningen, Netherlands

Developed GIS applications for spatial ecological models on dispersal patterns of plants and animal species in fragmented habitat according to metapopulation theory.

• Improved the Landscape ecological Analysis and Rules for the Configuration of Habitat (LARCH) model user interface which is a plug-in for ArcMap to analyse population viability given fragmented habitat.
• Expanded functionality of the metapopulation simulation model (METAPHOR) interface which operates as a standalone Windows program that uses GIS freeware to embed GIS capabilities into the program interface.

IMK-IFU - Garmisch-Partenkirchen, Germany

2006-2009

IMK-IFU is an internationally reclaimed research institute, with ties to several universities in Germany, amongst which the Albert-Ludwigs University in Freiburg im Breisgau, Germany where I obtained my PhD.

Research Assistant

2006-2009

• As part of EU’s NitroEurope research project on nitrogen cycling, developed a model subroutine *DECONIT* that was published as an isolated program and later embedded in a larger modelling platform MoBiLE.

EDUCATION

ALBERT LUDWIGS UNIVERSITY – Freiburg im Breisgau, Germany

2006-2009

PhD in Forest and Environmental Sciences, *magna cum laude*.

WAGENINGEN UNIVERSITY – Wageningen, Netherlands

1998-2005

M.S. in Forestry and Environmental Sciences.

• Master’s thesis on modelling decomposition kinetics published in Soil Biology and Biochemistry.

AMSTERDAM UNIVERSITY– Amsterdam, Netherlands

2001-2005

M.A. in Philosophy of Environmental Science.

• Master’s thesis on the relationship between environmental science and public perception of environmental issues.