PERSONAL INFORMATION

Simon Benjamin Hengeveld, PhD

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Full Stack Software Developer with a PhD in Computer Science with a strong foundation in a wide range of programming languages gained through professional experience and academic research. In recent years, I have focused on cloud-native and local applications using Python, Node.js and Typescript.

EDUCATION

February 2021 - February 2024

PhD Computer Science
IRISA, University of Rennes, France

Extending Distance Geometry Methods: not only distances (A study of three applications, with a focus on structural biology)

September 2018- September 2020

Master in Computing Science (Data Science)
Universiteit Utrecht, The Netherlands

Thesis: Solving the Art Gallery Problem in Iterations

September 2014 - September 2017

Bachelor in Computer Sciences (IT)
Universiteit Utrecht, The Netherlands

August 2013 - May 2014

Study Abroad Year
Juniata College, United States.

▪ Fullbright Scholarship

EXPERIENCE

June 2024 - Present

Full stack software developer for health research at Wageningen University & Research
Designed and deployed full-stack solutions, including scalable Node.js and Python cloud applications using AWS (Lambda, API Gateway, and DynamoDB) along with responsive frontend interfaces built with React and Next.js.

July 2022 - Present

Mobile app developer: World Heritage Collect
Owner and developer. The app is built using a Kotlin/Java Multiplatform back-end and native (SwiftUI and Compose) front-end.

November 2017-May 2018

Frontend software engineer at Paragin
Development on Remindo Toets: Exam software, PHP, HTML & JavaScript

May 2013 - Present

Frontend web developer (different businesses)
Transparant Leiden (Netherlands), Innovators Lab (Netherlands), Lambrechtpros (USA), using PHP, HTML & JavaScript

COMPUTER SKILLS

Web & Frontend
TypeScript, Node.js, React, Next.js, PHP 4/5, HTML 5, CSS3

Core Languages
Python, C#, C++, Java

Cloud Infrastructure
AWS: API Gateway, Lambda, ECS, ECR, Cognito, DynamoDB, S3

Mobile
Kotlin/Java Multiplatform, Swift/SwiftUI, Jetpack Compose

Databases
MySQL, SQLite, DynamoDB (NoSQL)

Tools
Git, Kubernetes, Docker, GitHub actions, Visual Studio, JetBrains IDEs

Other skills
Scrum, Agile Development

PERSONAL SKILLS

Mother tongue	Dutch
Other language(s)	English*, German, Spanish (B1)
	*Bilingual Education in high school, graduated with an International Baccalaureate (IB)

SELECTED PUBLICATIONS

June 2024
A Practical Algorithm with Performance Guarantees for the Art Gallery Problem
Journal of Discrete Mathematics & Theoretical Computer Science, Volume 25, Number 2

July 2023
A Study on the Covalent Geometry of Proteins and Its Impact on Distance Geometry
International conference on Geometric Science of Information (GSI 23)

December 2021
An Optical Processor for Matrix-by-Vector Multiplication: an Application to the Distance Geometry Problem in 1D
Journal of Optics, Volume 24, Number 1

A full list of my (**12**) publications can be found at: https://simonhengeveld.com/publications