

Alexander Goddijn

PHYSICS · COMPUTER SCIENCE · ENGINEERING

☎ (+1) 778-929-4909 | ✉ alex.goddijn@gmail.com | 🏠 www.agoddijn.com | 📱 agoddijn | 🌐 agoddijn

Skills

Software C/C++, HTML5/CSS, Javascript/Typescript, git, Java, ROS, Node, Express, Angular, Linux, Assembly, Julia, Python
Physics Classical Mechanics, Thermodynamics, Quantum Mechanics, General Relativity, Electromagnetism, Control Theory
Languages French, Dutch, English (all fluent)

Experience

Autonomos SOFTWARE ENGINEER

May. 2017 - Aug. 2017 *Berlin, Germany*

- Worked as part of a team implementing a full stack autonomous driving solution
- Wrote object visualisation plugins for rViz
- Researched the feasibility of integrating certain computer vision algorithms into the perception pipeline
- Wrote a proof of concept for processing and extracting obstacles from stereo data

Key Admissions TUTOR

Jan. 2017 - Apr. 2017 *Vancouver, Canada*

- Taught students from 2nd grade all the way to 12th grade in Maths, Physics, and Chemistry, both IB and BC curriculum

Axiom Zen SOFTWARE ENGINEER

Jan. 2014 - Apr. 2014 *Vancouver, Canada*

- Had a role helping a startup as a general software engineer. Loose structure meant taking on lots of high level responsibilities
- Did front end design for website application using industry standard technologies (MEAN stack)
- Set up OpenStreetMap servers and drew boundaries between geographical areas
- Created automation tools (in Python) for setting up email templates and estimating traffic time for OpenStreetMap routes by comparing to GoogleMaps routes

TomTom SOFTWARE ENGINEER AND PRODUCT MANAGER

May. 2013 - Sept. 2013 *Amsterdam, Netherlands*

- Assisted in the implementation of several algorithms, and helped initiate the design process for a new wearable fitness product
- Implemented clustering algorithm (k-means) to determine location of a cluster of destinations
- Created a design proposal for wearable fitness tracker

Technical Projects

UBC Insight (Web app for querying UBC data) CORE MEMBER

Jan. 2017 - Apr. 2017 *Vancouver, Canada*

- Created a web app (front and back end) to query and display a database of classes and rooms at UBC
- Implemented a query parser, query validation, greedy algorithm for scheduling classes in rooms, and front end interface for working with query language

Startup Weekend CORE MEMBER

Mar. 2017 *Vancouver, Canada*

- Created a minimum value product based on the idea of practicing for technical interviews through a peer to peer video chat platform
- Created a NodeJs web application with working video chat and code editor over the weekend

UBC Sailbot (autonomous sailing vessel) MEMBER

Jan. 2015 - Apr. 2015 *Vancouver, Canada*

- Helped in the design and implementation of deriving a horizon line from an IMU unit

Engineering Physics Robot Competition CORE MEMBER

Jul. 2015 - Aug. 2015 *Vancouver, Canada*

- Designed and built an autonomous robot designed to pick up and transport stuffed animals for a competition
- Achieved 3rd place and received the highest grade for our product from an extremely competitive pool of 16 teams

NWHacks ONLY MEMBER

Mar. 2014 *Vancouver, Canada*

- Created an iOS application called ZenFlow, a geolocation based photo sharing app
- Built the application myself from the ground up in Swift. The idea was to share photos and view them based on the location where they were taken

Youtube Java Tutorials PRODUCER

Nov. 2010 *Amsterdam, Netherlands*

- Created a series of introductory tutorials for learning Java, and very basic Java syntax. The videos have amassed 33,000 views and a lot of positive feedback

Education

UBC (University of British Columbia) B.Sc. IN COMPUTER SCIENCE AND PHYSICS

Sept. 2013 - present *Vancouver, Canada*

- Science One (Physics, Chemistry, Biology, and Mathematics)
- Engineering Physics (Electrical, Mechanical, and Computer Engineering. Fundamentals of mathematics and physics including Probability, Statistics, applied PDEs, Linear Algebra, Control theory, Thermodynamics, Quantum Mechanics, and Electromagnetism)
- Computer Science (Scientific Computing, Data structures, Algorithm analysis, Software Engineering, and Machine Learning)
- A- average (82.1%)

International School of Amsterdam FULL IB DIPLOMA

Sept 2008 - Jun 2013 *Amsterdam, Netherlands*

- Final score of 38/45