# About me

My name is Fredrik Johnson and I'm very intrested in doing my master thesis at MPC.
I have always been intrested in the film "magic" and how it's created, which is one of
the major reasons I wanted to study Media Technology and Engineering at Linkoping
University. Rob Piekes lectures about the work that is being done at MPC my intrest
grew even more. To be able to apply math and physics and write programs plugins
that artists can use to create something awesome is probably one of the few things that
really gets it going for me. During my time as a student I have developed strong skills
in programming especially in C++ and C. I'm also competent in a various of topics
such as Matlab, web development and image processing to name a few.

More information about me and my projects can be found at the websites below.

**Website:** http://gvasa.github.io
**Linked-in:** Fredrik Johnson

Following you can find my resume and grades from Linkoping University,
I look forward to hear from you!

# FREDRIK JOHNSON

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+46 (0)70 - 465 51 23 ⋄ Frejo989@gmail.com

## EDUCATION

**High School**
Technology Program with Specialization in Programming & Mathematics
LindenGymnasiet                                                                                  *2008-2011*

**University**
B.Sc in Media Technology & Engineering
*Linkoping University*                                                                           *2014*

M.Sc in Media Technology & Engineering
*Linkoping University*                                            *Exptected graduation, June 2016*

## EXPERIENCE

**Bahelor Thesis,**
**Game of Domes**                                                                   Spring 2014
*Developer*                                                    *Visualiseringscenter C, Norrkoping*

Together with six associate students I Developed a framework which can be used to create immersive games for dome theaters and planetariums which utilises several projectors to cover very large screens. The project was initiated by the Visualization Center C in Norrkoping, where the goal was to create an immersive game which emphasizes on co-operation between the players. The framework was developed in three different components; a server, a web client and a client running the application. The framwork was developed using C++, Node.js and various C++ libraries such as eNet (networking), Open Scene Graph (graphics), Bullet (physics) and Simple Graphic Cluster Toolkit (multiple projectors).

**Media Technology Days**                                                    Fall 2014 - Spring 2015
*In charge of exhibition*                                                          *Norrkoping, Sweden*

Together with twelve assosiate students I participated in organizing an annually event, The media Techonology Days. The Media Technology Days is a non-profit event arranged by students, connecting students, working media technicians and companies in the industry. I was in charge of the exhibition, making sure everything was set up correctly and working as expected during the event. I had a close contact with all the companies that either delivered or attended the exhibition. Where i learned to cope with stress and to handle a lot of different personalities one encounters when working in a group.

## LANGUAGES

**Swedish**      First language
**English**      Fluently both in speech and writing

## SKILLS AND TECHNICAL STRENGTHS

**Computer Languages**      C, C++, C#, Java, OpenGL, Javascript, Matlab
**Tools**                   Git, Valgrind, LaTeX, Scrum

## PLATFORMS

Developing using Windows on a daily basis which is the prefered platform. However also fairly proficient using Unix based systems as well

## HONORS AND AWARDS

**Nominated to the Gray Cube**                                                                    2013
*Best tech project of the year*                                                          *Norrkoping, Sweden*

The Cubes is a annually held competition where all Media Technology students can participate with their school projects. Me and four associate students got nonimated to the Gray Cube, best tech project of the year, with our fast paced multiplayer game Tube Wars.

# Ii.U LINKÖPING UNIVERSITY

**Official Transcript of Records for**

FREDRIK JOHNSON

( Civic registration number 920825-1877  )

| Courses | Credits | Grade | Date |
|---|---|---|---|
| Foundation Course in Mathematics | 6.0 | 4 | 2011-10-17 |
| Linear Algebra | 6.0 | 3 | 2011-12-12 |
| Programming | 6.0 | 4 | 2011-12-13 |
| Digital Media | 6.0 | G | 2011-12-19 |
| Electronic Publishing | 6.0 | 5 | 2012-02-24 |
| Calculus | 6.0 | 3 | 2012-03-08 |
| Object-Oriented Programming | 6.0 | 5 | 2012-03-28 |
| Applied Mathematics in Science and Technology | 6.0 | G | 2012-05-16 |
| Calculus | 6.0 | 3 | 2012-05-28 |
| Computer Graphics | 6.0 | 4 | 2012-05-30 |
| Communication and User Interfaces | 6.0 | 3 | 2012-12-14 |
| Physical Modelling | 6.0 | 3 | 2012-12-20 |
| Applied Transform Theory | 6.0 | 3 | 2013-03-12 |
| Vector Analysis | 6.0 | 4 | 2013-03-22 |
| Statistics | 6.0 | 5 | 2013-06-01 |
| Programming in C++ | 6.0 | 4 | 2013-06-07 |
| Signals and Systems | 6.0 | 4 | 2013-06-10 |
| Design | 6.0 | 3 | 2013-06-10 |
| 3-D Computer Graphics | 6.0 | 4 | 2013-06-20 |
| Calculus III | 6.0 | 3 | 2013-08-27 |
| Automatic Control | 6.0 | 5 | 2013-10-30 |
| Graphic Arts | 6.0 | 4 | 2013-11-01 |
| Practical Data Visualization and Virtual Reality | 6.0 | G | 2013-12-20 |
| Modelling and Simulation | 6.0 | 4 | 2014-01-18 |
| Modelling Project | 6.0 | 5 | 2014-04-04 |
| Data Structures | 6.0 | 3 | 2014-06-02 |
| Image Processing and Analysis | 6.0 | 3 | 2014-10-03 |

Linköpings universitet

**Official Transcript of Records for**
9208251877    FREDRIK JOHNSON

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Design and Programming of Computer Games           6.0   5    2014-10-31

Design Patterns                                    6.0   3    2014-11-06

Advanced Image Processing                          6.0   4    2014-12-17

Information Visualisation                          6.0   5    2015-03-30

Agile Usability Development for Handheld Devices   12.0  5    2015-05-11

Artificial Intelligence – Principles and Techniques 6.0  5    2015-06-02

Scientific Visualization                           6.0   4    2015-08-25

Media Technology – Bachelor Project                18.0  G    2015-10-26

Artificial Intellegence for Interactive Media      6.0   5    2015-12-02
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                              Total sum:       234.0 credits
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The above is an excerpt from the register of student records.
b) Transferred credits, date of decision

This transcript contains credits converted 1 July 2007.

60 credits represent a full academic year.