# Zachary Lorenzen

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## Technical Skills:

Languages: Java, C#, C, C++, Scheme, Prolog, Python, LaTeX, SQL, BASH, Groovy
Programs: Microsoft Office, Eclipse, Unity, Blender, SPSS, VIM, Visual Studio, SVN,
OS: Windows, Ubuntu Linux

## Relevant Projects:

*Software Engineering - HAM*

> HAM stands for Home Automated Management, and is a project than I and two others students worked on.  We simulated a company that provided remote home management to clients, which allowed them to turn lights on and off, and other basic functions.  Additional information can be found at our blog: *hambvu.blogspot.com*

*Computer Science Capstone Project (Undergraduate) – Dias (Unity)*

> I and one other person formed a small development team that worked on a fully 3D, team-based, competitive multiplayer, arena platformer.  Additional information can be found at our blog: *diasdev.blogspot.com*

Data Compression Research

> During the summer of 2013 I spent time working on developing and testing a new lossless data compression algorithm with one of my professors at Buena Vista University.  Dr. Stone is a professor of physics and computer science, and we tested the new method against static and adaptive Huffman algorithms, the Shannon-Fano algorithm, and others.

Regression Analysis – Competitive Gaming and Speed

> In this study I collected data from over two thousand Starcraft players on how fast they play, their age, and other factors that relate to their gameplay.  I used this data to find a correlation between player's speed and their age, in-game army choice, and in-game league.

## Work History:

Academic Assistant at Buena Vista University
September 2011 to May 2014
*I tutored and held study sessions for math classes including algebra, calculus 1-4, and differential equations.  I also occasionally proctored these classes and helped the professor prepare for lectures.*

Farm Hand at Lorenzen Farms
2006 to September 2010, May 2016 to October 2018
*I helped my father with work on his farm.  We raised cattle, hogs and chickens as well as growing crops.*

## Education:

Graduated: Buena Vista University, Storm Lake IA - GPA: 3.8
Bachelor of Science in Computer Science/Mathematics and Corporate Mathematics