# Andrew T. Van Gilder

262-366-8370

vangilder.andrew@gmail.com

**Profile:** Data Scientist with Analytics Master's (in progress), Applied Mathematics B.S., Chinese Language B.A. (Digital Art and Computer Science minors) with exceptional mentorship experience

#### **EDUCATION**



### **Northeastern University**

2018

Master's of Professional Studies

Master's: Analytics



### **University of Wisconsin-Madison**

2013 - 2017

Bachelor of Science

Majors: Applied Mathematics (Computational Methods) and Chinese Language

Certificates: 4D/Multimedia Art and Computer Science

GPA: 3.23



# Nankai University

Summer 2016

Intensive Chinese Language Program in Tianjin, China

GPA: 4.0

# WORK EXPERIENCE

# University of Wisconsin Student-Athlete Tutor (2016-2017 Academic Year)

-Tutored and mentored student-athletes in Multivariate Calculus, Linear Algebra, Physics

# University of Wisconsin Summer Program Mentor (Summer 2017)

- -Led large groups of international students (30+) through program content.
- -Program content, developed by supervisor and me, included academic, social, field research events.

#### Private Tutor (9/2009-Present)

- -Provides personalized lesson plans for students (Grade 5-College Senior) in topics in advanced Math.
- -Coached and participated on several state-competition-winning Math, Physics, and Science teams.
- -Has tutored dozens of students individually and coached hundreds of students in teams.

# TECHNICAL SKILLS

# **Programming Skills:**

**Python:** train random forest regression with 60,000 diamond sales data, predicts cost with ~95% accuracy -calculate tf-idf dictionary for transcripts of popular T.V. series to analyze similarities and differences in characters' vocabulary

Java: construct decision trees for classification of image data and for AI chess player

- -use feed-forward neural network for regression to predict Facebook post reach
- -build naïve bayes classifier to predict genre of Shakespeare's plays

Matlab: built Harris corner detector for images in OpenCV

**JavaScript**: create shading algorithm for 3D geometry using OpenGS in the canvas, double-pass rendering for "jumbotron" effect using OpenGS in canvas

SQL, Microsoft Access: Create operational web form for database manipulation and entry

Flask: web-based quadratic equation solver app

**HTML5, CSS:** some limited web application and webpage design including for my personal webpage, hosted on github: https://andrewvq23.github.io/

github with selected project work: https://github.com/AndrewVG23

# OTHER RELEVANT SKILLS

### Multimedia Skills:

Adobe Photoshop: logo and pamphlet design. Portrait touch up and surreal artwork.

Rhinoceros 3D: Three dimensional designs based on schematics. Design detailed mechanical items.

**Autodesk Maya**: model, shade, rig and animate character with full walk-cycle in 1.5 minute high-definition video rendered in V-ray. (https://www.youtube.com/watch?v=oeB0tWCiMRY)

- -Script with Python to generate geometry for scenes
- -Advanced V-ray shading techniques

Language Skills: Mandarin Chinese (Limited Working Proficiency). I regularly converse with friends in Mainland China and Taiwan.