Andrew T. Van Gilder

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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://andrewvg23.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.