

Satvik Shukla

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Education

University of Washington (UW)

Seattle, WA

B.S. IN COMPUTER SCIENCE

Expected Graduation: Dec. 2019

- GPA: 3.80 | Minors: Applied Math and Mathematics | Study Abroad: London, UK (Summer 2017)

Skills

Data Python (pandas, numpy, keras, pyTorch, matplotlib), R, MATLAB

Languages Java, C, C++

Database SQL(SQL Server, SQLite, MySQL), NoSQL (AsterixDB), Spark

Web HTML, CSS, JavaScript, Flask, Django, Drupal, PHP, REST, JSON

Miscellaneous Azure, AWS, Unix/Linux, Tableau, Google Analytics, \LaTeX , Git

Experience

Introduction to Digital Humanities, iSchool @ UW

Sep. 2018 - PRESENT

TEACHING ASSISTANT | OMEKA, DIGITAL SCHOLAR LAB, OPENREFINE, LEXOS, VOYANT

- Assist head faculty member with classroom instruction material and monitor student progress to identify areas that require improvement.

Berkman Klein Center, Harvard University

Jun. 2018 - Aug. 2018

RESEARCH INTERN | PYTHON (KERAS, PANDAS, NUMPY, FLASK), AMAZON ELASTIC BEANSTALK, JAVASCRIPT

- Developed a Neural Network in **keras** based off **ResNet-50** to infer identity of artists from user-input paintings/photographs.
- Implemented **Neural Style Transfer** to make the user-input images resemble a painting from the inferred lesser-known artist.
- Presented and demoed the final product as hosted on the web using **Amazon Web Services** to over 70 academics.
- Available for exploration at: bit.ly/satvik-curate

Engineering Academic Center, UW

Apr. 2018 - PRESENT

MATHEMATICS INSTRUCTOR

- Develop and deliver approximately 4 hours of instruction per week to students in **Differential Equations** and **Linear Algebra**.
- Guide and tutor students on concepts of calculus and pre-calculus to enhance the problem solving skills and refine the fundamental concepts.

def hacks()

Mar. 2017 - Oct. 2018

HEAD ORGANIZER

- Coordinated all logistics for the 24-hour event, including workshops and mentorships, to effectively organize hackathon with over 150 attendees.

Projects

Code, Comments, and Issues

PYTHON, IBM WATSON, GITHUB API, BOKEH | SWEHACKS 2018 - BEST IN SHOW

- Developed a platform using **Python** to contrast top GitHub repositories based on 'Issues comments' with any user-input GitHub repository.
- Used **Watson's Tone Analysis** over the comments extracted from most the active repositories to quantify standards for open-source collaboration.

Art and R

R, SHINY, HIGHCHARTS, TABLEAU | PERSONAL PROJECT

- Analyzed the emergence of patterns across different color spaces in over 150 paintings from the 15th century using pixel-by-pixel color observation.
- Carried out **statistical analysis** in **R** to confirm the lack of change in median color values from late Middle Ages to Early Renaissance.

Alpha Maths

C#, WOLFRAM ALPHA API, UNITY | DEF HACKS() 2017 - BEST IN SHOW

- Developed a **Microsoft HoloLens** application to render solutions to virtual equations and questions input by user using hand movements.
- Used **C#** to design an interface that converted input to \LaTeX , to make it readable by Wolfram Alpha, which produced result back on the HoloLens.

Courses

Data Structures and Parallelism (CSE 332)

Data Management (CSE 344)

Advanced Machine Learning (CSE 546 & STAT 435)

Deep Learning (CSE 599)

Statistics for Data Science (STAT 391)

Advanced Multivariable Calculus (MATH 324)