James Daus

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EDUCATION

COLGATE UNIVERSITY, **Bachelor of Arts**, Hamilton, NY   August 2018 - May 2022
- Major: Computer Science
- Major GPA: 3.82/4.00
- Dean's Award With Distinction for Academic Excellence

HARVARD UNIVERSITY, **Summer Remote Courses**, Cambridge, MA   May 2020 - August 2020
- CS50AI: Created AI in Python such as a CNN using TensorFlow and NumPy which identified road signs with 97% accuracy
- CS50GD: Created and debugged 2D and 3D games in popular frameworks LOVE and Unity using Lua and C++

BROWN UNIVERSITY, **Summer Pre-College Courses**, Providence, RI   July 2017 - August 2017
- Communicated clearly about methods used and results to assist with research and offered peer critiques at Brown Aging Lab.

THE NEW SCHOOL OF NORTHERN VIRGINIA, Fairfax, VA   August 2014 - May 2017
- AP Scholar with Honor, Improv Comedy Club Co-Founder, Head of Student-Teacher Conflict Resolution

TECHNICAL SUMMARY

- **Languages:** Python, C, C++, Java, Lua
- **Libraries and Formats:** NumPy, Pandas, TensorFlow, Scikit Learn, JSON
- **Software and Interfaces:** SSH, Git, Unity, Blender, Aseprite, Excel, Google Sheets, Logic Pro, Ableton, FL Studio
- **Coursework:** Independent Research in ML, CS50 AI in Python, CS50 Game Development, Computer Systems, Linear Algebra, Discrete Structures, Calculus III, Cybersecurity, Rendering, Composition, Harmony, Digital Music Studio
- **Graphic Design:** Engaged in iteration and feedback cycle to create cartoon graphics and promotional videos for client Magic Carrot Candles on Etsy using Photoshop, Illustrator, and Premiere Pro.

TECHNICAL PROJECTS

ML AND RESERVOIR COMPUTING, *Research Assistant*, Colgate University, NY   August 2020 - Present
- Implemented then empirically and graphically compared performance of handwritten Echo State Network against Random Forest, SVM, Feed Forward NN, 1D CNN, and LSTM classifiers on network data using scikit learn and keras in Python.
- Processed raw network packet captures from partners at University of Chicago IoT Lab for use in ML pipeline using NumPy
- Maintained project organization and cooperation using SSH to research servers and with well-labeled, frequent Git commits.

PROPERTY IMPROVEMENT ENTERPRISES, *Marketing Data Management*, Silver Spring, MD   May 2019 - August 2020
- Automated upload and formatting of social media analytics to company spreadsheets using Google Apps Script and JSON, turning hours of weekly work into just minutes.
- Created reports and graphics in Google Sheets and Monday.com for increased visual clarity of data and trends over time.

THE MAIDS DMV, *Marketing Data Management*, Alexandria, VA   October 2017 - August 2019
- Led data entry and organized spreadsheets for the marketing team to choose optimal price ranges for varying customer demographics.
- Compared data sets in Excel for discrepancies which prevented missing or double-mailing potential clients.

LEADERSHIP EXPERIENCE

ELUCE GAMES, *Founder, Remote*   August 2020 - Present
- Created design documents for minimum viable product indie game, highlighting unique appeal and production needs to aid in team recruitment planning and execution.
- Presented pitch to panel of experienced entrepreneurs and used feedback to further hone concise and clear presentation skills.
- Enrolled and accepted into Thought Into Action startup incubator to receive mentoring and funding.

COLGATE COMPUTER SCIENCE DISCORD, *Creator*, Hamilton, NY   August 2020 - Present
- Created official Discord server for Colgate Computer Science Department, enabling connection during remote education
- Integrated classes to facilitate collaborative learning and community growth for over 150 students and Professors

URBAN EVOLUTION, *Parkour and Gymnastics Instructor*, Sterling, VA   December 2017 - August 2018
- Led large groups of students aged four through sixty in parkour classes, requiring widely understandable yet descript explanations to ensure safety and proper procedure.
- Designed efficient floor plans in cooperation with colleagues, with artistic layout of murals and large structures, prioritizing member experience in order to increase the value of monthly subscriptions.

COMMUNITY FOUNDATION FOR NORTHERN VIRGINIA, *Advisor*, Hamilton, NY   August 2019 - Present
- Analyzed and discussed applicants with other advisors to decide how to allocate $20,000 annually for children's health.

NSN B-BOYS, *Break Dance Team Co-Founder,* Arlington, VA   August 2016 - May 2018
- Organized team roster, dues, fundraising, event signups, and led practice, improving both organizational and teaching skills.