Andrew Cupps

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Education

B.S. Computer Science   May 2025
University of Maryland (UMD) – College Park   GPA: 4.00
- UMD Honors College – Honors Global Communities
- President's Scholarship Recipient

Skills

- **Programming Languages:** Java, R, Matlab, JavaScript, Python, C++
- **Software & Tools:** Eclipse, JUnit, RStudio, LaTeX, GitHub, Matlab, VS Code

Projects

Schreckliche Seuche   Mar - May 2022
Disease Spread Simulation, Full Stack Developer
- Modelled the spread of a disease through a community of hundreds of households in **Java**, incorporating various factors based on user inputs.
- Visualized total infections, active infections, and mortality rate with three graphs using **Slick2D** based on simulation data.
- Collaborated with a team of peers primarily using **GitHub**.

Data Science in R   Aug 2022 - Present
Honors Global Communities, Student
- Automate conversion of CSV and Excel filetype datasets into usable frames via **tidyverse** libraries, notably **dplyr** and **tidyr**.
- Effectively analyze, reduce, and extract relevant data from various sets spanning millions of datapoints.
- Visualize data through standardized themes using **ggplot2**.

JSENN   Dec 2022 - Present
Neural Network Evolution Simulation, Solo Developer
- Implemented simplex noise libraries to generate a scalable, naturalistic 2D terrain map.
- Design and write a library in **Java** for creation and use of genetics-based neural networks requiring use of only eight commands but providing a further set of methods for neural network customization.
- Use **AWT** and **Swing** to efficiently update and render neural networks and simulation objects at custom framerates and window sizes.

Experience

Jersey Mike's Subs & Sandwiches of Timonium   Mar – Aug 2022
Team Member
- Worked with two to four other team members at a time to perform various food-service tasks in a fast-paced environment, including taking orders, preparing sandwiches, and organizing deliveries of food and supplies.