## NAME
WillHord@gmail.com

Will Hord – Software Engineer

## SYNOPSIS
**Will** [OPTIONS] COMMAND [ARG...]

## DESCRIPTION
Highly motivated software engineer with expertise in computer systems, machine learning, and robotics. Skilled in software development, data analysis, and research to tackle complex problems.

## EXPERIENCE
**Software Engineer | University of California Santa Cruz | June 2021 – July 2023**
- Sole engineer responsible for the development and maintenance of 50+ websites.
- Leveraged Python, JavaScript, and Bash scripting for site creation to reduce development time and cost by more than 25%.
- Upgraded and optimized more than a dozen Drupal sites and generated reusable PHP skeleton code for custom web modules, improving site performance and scalability.
- Developed new methods for upgrades and migrations to newer Drupal versions, presented solutions to software developers across the University of California system, improved cross-campus collaboration and efficiency.

**Machine Learning Research Intern | IBM Watson Research Center | June 2018 – February 2019**
- Led two machine learning medical detection research projects for high-risk patients, improving prediction accuracy for psychosis and drug abuse.
- Research peer reviewed, published, and presented at the February 2019 SPIE medical imaging conference.
- Designed and implemented a Python-based program with TensorFlow and Scikit-learn to efficiently assess and compare multiple classification and regression models on large datasets, reducing model selection time and improving overall model accuracy by over 15%.
- Engineered data cleaning and formatting tools that enhanced machine learning model accuracy by 20% through streamlined preprocessing, ensuring more reliable and consistent results.

**Technology Office Intern | Pelham School District | May 2019 – June 2019**
- Coordinated technical logistics for district-wide virtual STEM conference attended by over 2000 students and educators.

## FILES
* **Education**
  - Bachelor of Science in Computer Science
    University of California Santa Cruz | September 2019 – June 2023
* **Certifications**
  - Deep Neural Networks with PyTorch – IBM
* **Programming Skills**
  - Python, C++, C, React JS, JavaScript, HTML, PHP, SQL, Java, CSS
* **Software & Tools**
  - Git, TensorFlow, PyTorch, Scikit-Learn, Apache Web Server, DevOps, Agile Software Development, LaTeX, Django, Arduino, Linux, Data Visualization Libraries (e.g. Matplotlib, Seaborn)

## EXAMPLES
> Publications

  * ***Predicting Conversion to Psychosis in Clinical High Risk Patients using Resting-State Functional MRI Features*** *SPIE. Jolie McDonnell, William Hord, et al. March 2019*

> Awards

  * **Westlake Regional Science Fair – 3rd Place** – *Testing Quantum Encryption Protocols in Real-life Situations Using Secure Quantum Tunnels – 2018*

  * **Eagle Scout** – Organized and led service project to build an outdoor classroom at local elementary school to teach students about ecological issues and sustainability – *2018*

> Memberships

  * **Cruz Hacks –** Developed an iOS app to detect recyclable materials using machine learning and computer vision – *January 2020*

  * **Slugbotics –** Facilitated the design, materials sourcing, and fabrication of a 15lb BattleBot for use in the February 2022 Sacramento Battle Bot competition – *2019 – 2023*

  * **Formula Slug –** Collaborated with team to design mechanical and electrical components for small electric vehicle using SolidWorks and 3D printing – *2019 – 2021*

> Projects (See Github)

  * **Deep Learning Graph Reader**
    - Utilized a Large Language Model (BERT) and Convolutional Neural Network to analyze and extract data from diverse types of graphs (e.g. bar charts, and scatter plots, etc.)

  * **Multithreaded HTTP Server**
    - Designed and implemented a high-performance, multithreaded HTTP server in C.
    - Engineered a robust and efficient system capable of handling and processing multiple concurrent HTTP requests using POSIX threads.

## AUTHOR
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