Pauline Nicolle

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EDUCATION

University of California Irvine | Bachelor of Science in Computer Science — Irvine, CA
- **GPA**: 3.6
- **Honors:** Dean's Honors List

Graduated April 2024

Specialization in Intelligent Systems

SKILLS

Core Programming	Python	C++/C
Libraries	Numpy	Matplotlib	PyTorch	Pandas	Sklearn
Additional Languages	Java	MIPS Assembly	Delphi	Verilog
Databases	MySQL
Miscellaneous	Git	Adobe Photoshop	Video Editing	Soldering

PROJECTS

Machine Learning and Data Anaysis for Settlement & Electricity Detection in Sub-Saharan Africa | *Python, PyTorch Lightning, Github, W&B*
- Preprocessed and sub-tiled satellite images with data augmentation, implemented and trained various semantic segmentation models, including three baseline models (SegNet, Unet, FCNResNet) and a modified SqueezeNet architecture, using PyTorch Lightning
- Utilized Weights and Biases for model training monitoring, hyperparameter tuning and model validation

Smart Academics, Wellness, and Rest Planner | *Swift, Xcode, Canvas API, Apple HealthKit*
- Developed a comprehensive iOS application that seamlessly integrates Canvas course data with personal health metrics, delivering an intelligent scheduling solution that optimizes study times, fitness activities, and rest periods for peak academic and physical performance.
- Enabled dynamic adjustments to schedules based on academic and health changes, with an intuitive iOS interface.

Web Scraper & Search Engine | *Python, BeautifulSoup, Porter Stemmer, Gradio*
- Search Engine running on linux machine, including text processing, web crawling, index construction, and a retrieval component.
- Used partial inverted indexes, with stemming and tokenization.
- Created Gradio interface to return URLs that correspond to search queries, using tf-idf vectors for each document and token.

Smart AI for Checkers | *Python*
- Developed an intelligent AI system capable of outperforming a strong AI opponent in Checkers, achieving a success rate of approximately 70%.
- Used Monte Carlo Tree Search (MCTS) algorithm.

EXPERIENCE

Freelance Artist — Jan 2021 – Dec 2023
- Cultivated and engaged a combined following of over 40,000 people across multiple social media platforms through consistent, high-quality content creation and strategic audience outreach.
- Crafted visually compelling promotional materials for big online personalities, including album covers, posters, and character designs, that effectively communicated brand objectives and resonated with the target audience.