ROEL-JUNIOR ALEJO VIERNES

Computer Science BSc (Hons) Graduate

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PERSONAL STATEMENT

Computer Science graduate (2:1) and multidisciplinary Creative Technologist specializing in the intersection of Machine Learning, Human-Computer Interaction and digital storytelling. From developing real-time Computer Vision systems (HandTyper) to leading technical video production for the University of Greenwich, I excel at translating complex engineering principles into high-fidelity user experiences. Seeking to leverage my background in Python, ML, and professional media production to build the next generation of AI-driven creative tools.

PROJECTS

Final Year Project: HandTyper - Hand Gesture based PC Interaction

- Engineered a real-time gesture recognition system using Python, Mediapipe, and TensorFlow, enabling full PC control (mouse and keyboard) via high-fidelity hand tracking.
- Developed a custom BSL (British Sign Language) translation layer, utilizing landmark detection to interpret complex hand signals into real-time digital inputs.
- Implemented landmark detection to track hand points, facilitating accurate estimation of user gestures for seamless translation into mouse and keyboard actions.
- Optimized model performance for low-latency video feeds, ensuring smooth human-computer interaction across standard webcam hardware.

University Open Day Guides w/ NFC Tags

- To assist prospective students during the University Open Days whilst upholding the university's commitment to sustainability. I introduced a new interaction framework where staff members would have NFC tags linking towards a digital guide for the University and the relevant event.
- This reduced the need for approx. 300+ printed materials per event and allowed for easy access to information via smartphones.

Coursework Project: TAS Speedruns and the use of AI in Games

- Developed an autonomous AI agent for Super Mario Bros using the Monte Carlo Tree Search (MCTS) algorithm to optimize pathfinding and level completion speed.
- Researched and implemented various Machine Learning algorithms to control CPU behavior, focusing on rapid decision-making in dynamic video game environments.
- Achieved high-efficiency pathfinding by training agents to navigate complex obstacles and enemy patterns in the fastest time possible.

EDUCATION

BSc (Hons) - Computer Science - 2:1
University Of Greenwich

📅 Sep 22 – Jul 25   📍 Greenwich, London

- Modules inc. Human-Computer Interaction, Machine Learning, Applications of AI, Software Engineering, Data Structures and Algorithms, Advanced Programming, Operating Systems etc.

A Level
University of Kent Academies Trust

📅 Sep 20 – Jun 22   📍 Gillingham, Kent

- Subjects: Information Technology (D*), Business Studies (D*), Finance (BB)
- 152 UCAS points

GCSE
Brompton Academy

📅 Sep 15 – Jul 20   📍 Gillingham, Kent

INTERESTS

Technical

- Human Computer Interaction
- Cloud Computing
- Hardware Engineering
- Machine Learning
- Video Editing

Hobbies

- Content Creation / Social Media
- Music
- Traveling
- Gaming

VOLUNTEERING

Society President
comptech.gre (Greenwich Students Union)

📅 Sep 24 - Jul 25   📍 Greenwich, London

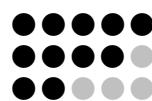### Programme Representative
Greenwich Students Union

📅 Sep 23 - Jul 24   📍 Greenwich, London

SKILLS

English   ●●●●●
Tagalog/Filipino ●●●●○
Spanish   ●●○○○

EXPERIENCE

Faculty Social Media Assistant

University of Greenwich

📅 June 2023 - Oct 2025   📍 Greenwich, London

- Multidisciplinary Production: Managed the full lifecycle of technical video content for the Faculty of Engineering & Science, bridging the gap between deep-tech research and user-facing digital storytelling.
- Stakeholder Management: Partnered with Professors and Researchers to storyboard and render accessible content for major university campaigns.
- Brand Growth: Owned social media channel management for the faculty, increasing publication frequency through streamlined content workflows.
- **Key Achievement: 2024/25 Clearing Campaigns:**
- Spearheaded the short-form video strategy, producing testimonials and facility showcases that drove audience engagement across faculty platforms.
- Collaborated with central marketing to ensure 100% brand consistency while translating complex engineering concepts for prospective students.

Student Ambassador

University of Greenwich

📅 Oct 2022 – Oct 2025   📍 Greenwich, London

- This role had allowed me to work for multiple different departments within the University including UK Student Recruitment, Outreach as well as roles within my own faculty.
- I had to constantly adapt my workflow and stance to appease the different stakeholders that I worked with as well as ensuring the I've furtherly received the University of Greenwich Instrumental Ambassador Award in 2024 for the contributions I've made in my role to the Scheme as a whole.

Teacher Assistant

Brompton Academy

📅 Jan 2022 - Jul 2022   📍 Gillingham, Kent

- As a Teacher Assistant for Brompton Academy, I was responsible for supporting Year 10 students with their learning in Business Studies. I assisted in lesson preparation, provided one-on-one support to students, and helped manage classroom activities to create a positive learning environment.

SKILLS

Leadership   Teamwork

Communication

Technical

Python   Java   HTML & CSS

Git/GitHub   Machine Learning

Azure   CI/CD/DevOps

Cloud Computing   UI/UX Design

Creative

Adobe Creative Suite   Video Editing

Social Media Video Production

Social Media Management   Orlo

Design

Figma   Human-Computer Interaction

CONTACT

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- LinkedIn: linkedin.com/in/rjviernes620

🏆 **Instrumental Ambassador Award 2024**
Received at Greenwich Employability Awards for Performance and contribution to the scheme over the year.

🏆 **Making a Difference Award 2024**
Recieved from the Faculty of Engineering and Science for volunteering and contribution to the University community.