Matías Piña Aguilera

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SKILLS

Python, JavaScript, Node.js, Vue.js, p5.js, D3.js, ML5.js, HTML, CSS, Git, Google Cloud Platform, Touchdesigner, GLSL, C++, Arduino, AWS, Pandas, PyTorch, Tensorflow, Processing, Adobe Creative Suite, Unity, SQL, Blender

EDUCATION

Parsons School of Design, The New School   **May 2025**
MFA in Design and Technology   *New York, NY*

Pontificia Universidad Católica de Chile   **July 2023**
MSc in Computer Science   *Santiago, Chile*

Pontificia Universidad Católica de Chile   **July 2021**
BSc in Design Engineering   *Santiago, Chile*

WORK EXPERIENCE

Freelance   **Feb. 2024 - Present**
Creative Technologist   *New York, NY*
- Led the development of an interactive installation for Inter NYC, integrating depth cameras, TouchDesigner, Python, and GLSL to create engaging and responsive user experiences.
- Developed an interactive installation and data visualization piece employing open data from the City of New York for an exhibition at BRIC House, employing Python, Arduino and Touchdesigner.
- Designed and developed 3D assets, animations, and interactive scenes for an accessibility-focused AR app using Swift and Blender.

Parsons School of Design   **Jun. 2024 – Present**
Teaching Assistant   *New York, NY*
- Supported students in courses such as "AI, Creativity, and Social Justice," "Immersive Storytelling," and "MS Data Visualization Thesis Studio," providing guidance on technical tools, creative processes, and project development.
- Taught and assisted with a wide range of technologies, including Vue.js, D3.js, Node.js, Python , JavaScript, CSS, HTML, Arduino, Unity and TouchDesigner.
- Provided one-on-one tutoring in web development, data analysis, web scraping and interactive media, fostering practical application of skills and helping students grasp complex concepts.

Research Assistant   *New York, NY*
- Designed and developed an experimental drawing tool using TouchDesigner and Stable Diffusion, enabling real-time enhancement of digital sketches with AI-generated animations.
- Implemented two custom Stable Diffusion pipelines using ComfyUI and TouchDesigner, generating real-time and non-real-time animations from still images and live video feeds.

The New School   **Oct. 2023 – Jan. 2025**
Data Scientist   *New York, NY*
- Developed a course recommender web application based on text similarity using Python and NLP tools, enhancing course discovery for students and aiding faculty and administrators in curriculum optimization.
- Conducted analysis of high-dimensional student data to identify key factors influencing retention, providing actionable insights for stakeholders.
- Engineered a web scraping pipeline in Python to analyze career trends of over 4,000 alumni, automating a previously manual process.

Umine   **Dec. 2022 - Sept. 2023**
Data Scientist   *Santiago, Chile*
- Developed a predictive analytics pipeline using Python, AWS, and SQL to identify and mitigate student dropout risks, delivering actionable insights.
- Created a dynamic internal interactive dashboard using Python, SQL and CSS for exploratory analysis and real-time business insights, improving decision-making processes across the sales and operations departments.
- Led the creation of a web scraping pipeline to extract and process client data from government websites, reducing daily task time by 90%.

University of Toronto   **Jan. 2022 - Dec. 2022**
Research Assistant   *Toronto, Canada*
- Developed interpretable machine learning models (tree-based and rule-based) to forecast at-risk students, achieving performance metrics comparable to state-of-the-art architectures.
- Mentored five undergraduate students in the Intelligent Adaptive Interventions (IAI) Lab, guiding weekly assignments on data analysis and research critiques.

Quansa   **Sept. 2021 - Nov. 2021**
Software Engineer Intern   *São Paulo, Brazil*
- Implemented front-end solutions with JavaScript and React, improving user dashboards, site layouts, and overall platform scalability.
- Collaborated with stakeholders to identify UX enhancement opportunities, translating key requirements into actionable improvements.