

# NICOLAS DESPREZ

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## Skills

- Proficient Languages: C, C++, Java, Python, JavaScript, HTML/CSS (Tailwind)
- Frameworks: JUnit, Next.js, React, Tailwind CSS, GSAP
- Developer Tools: Git, GitHub, Google Colab, Linux, VS Code, Visual Studio, IntelliJ, PyCharm, Trello

## Significant Projects

### Portfolio Website

Self, Remote

September 2024–October 2024

- Developed a dynamic portfolio website using React, Next.js, and GSAP to showcase resume and projects.
- Utilized React's component-based architecture to create scalable and reusable UI components.
- Designed and styled the website using Tailwind CSS, ensuring a responsive and modern UI.

## Professional Experience

### Assistant Team Lead - Contract

September 2024–May 2025

HII UNMANNED SYSTEMS, 1 Henry Dr, Pocasset, US

- Enhancing HII's maritime simulation environment by integrating high-fidelity bathymetric data, improving the realism and effectiveness of simulations for unmanned underwater vehicles (UUVs) such as the REMUS project.
- Lead a team of three in creating custom simulation environments using noise algorithms and procedurally generated height maps, which were converted into GeoTIFFs for compatibility with the 3D Tiles specification.
- Independently developed a height map generator and a height map-to-GeoTIFF converter, streamlining the workflow for simulation asset creation.
- Managed an Agile-based team workflow, participating in daily scrum meetings and helping oversee sprints.
- Created an extensive front-end in Unreal Engine 5 with custom C++ based plugins for API communication.

### Research Assistant

September 2023–March 2024

UNIVERSITY OF MASSACHUSETTS DARTMOUTH, 285 Old Westport Rd, North Dartmouth, MA 02747

- Developed a custom data scraper for extracting text-information from Digs to accumulate data for QA.
- Visualized data using Matplotlib with custom functions.
- Developed and trained a contrastive self-supervised model on pre-processed data.
- Gained expertise in deep learning, PyTorch, NumPy, Pandas, and TensorFlow.

### Riot Games 3D Artist

June 2023–August 2023

Rosewood Creative LLC., California

- Led 3D creative design and direction for the Arcane x Valorant collaboration, crafting visually striking advertisements that showcased in-game assets.
- Developed 3D segments ahead of schedule, surpassing quality expectations and contributing to the project's success.
- Produced hRiot Games' Valorant Arcane Season 2 skin announcement video, which garnered over 3 million views across social media platforms, exceeding both viewership and engagement goals within tight deadlines.

## Education

University of Massachusetts Dartmouth, North Dartmouth, MA

Expected May 2025

Bachelor of Science (Option: Software Engineering)