



**Daniel Giger**  
Senior Software Engineer  
AiRANACULUS

Daniel Giger has a Bachelor of Science in Computer Science and Math from the University of Massachusetts Lowell. He has experience developing software for High-Performance Computing as well as Robotics. He has studied reinforcement learning and used it to solve challenges such as the 3D mountain car problem. He worked as a software developer at UMass Lowell's Human-Robot Interaction Lab for several years where he gained expertise programming on Linux and became proficient at using Git to collaborate with other developers.

He also worked at UMass Lowell's High-Performance Data Analytics lab where he designed efficient parallel algorithms for processing big data. These algorithms included a fast technique for finding the highest values in an unordered array as well as a parallel algorithm for detecting dominators in a graph. He went on to present his dominator detection algorithm at SC19's undergraduate research competition in Denver.

Daniel has experience programming with many different languages including Python, C/C++, Mathematica, JavaScript, Bash, Java, C#, MATLAB, Kotlin, and Rust. He has used these languages for school, work, and independent programming projects. Independent projects include a Rubik's Cube solver based on graph theory, solving hundreds of programming challenges on sites such as Project Euler and HackerRank, and several video games.