NATHAN BAKER

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EDUCATION

Bachelor of Science in Computer Science with Honors Distinction // Mathematics Minor   Graduation: December 2021
>> Oklahoma State University, Stillwater, Oklahoma   GPA: 4.00

RELEVANT EXPERIENCE

Software Development Intern // Paycom Software, Inc.   May - August 2021
>> Constructed a new, central interface for logging into the Paycom software suite, removing the need for redundant authentication and enabling users to access all of their linked accounts from a single page.
>> Collaborated closely with team members to identify new project objectives and ensure that all React.js component logic aligned seamlessly with the API responses being generated on the backend.
>> Exhibited a live demo of the project during a department-wide meeting near the end of the summer.

Undergraduate Research Assistant // OSU School of Mechanical and Aerospace Engineering   October 2019 - May 2021
>> Designed and deployed a web interface to gather real-time data from infrasound detection equipment and display it for meteorological research purposes.
>> Employed parallel processing structures in Python and C++ to develop a lightweight autopilot framework for graduate students to practice implementing estimation and control algorithms in physical airframes outfitted with a RaspberryPi.
>> Presented several iterations of source code and documentation at weekly lab meetings.

Artificial Intelligence Bot in Rocket League // Personal Project   July 2020 - Present
>> Created a bot that can play a physics-based car soccer video game, based entirely on human gameplay.
>> Streamlined the collection and analysis of thousands of saved game replays via Bash and Python scripts.
>> Experimenting with various neural network structures and hyperparameters to refine model performance.

TECHNICAL SKILLS

>> **Languages:** Python, React.js, HTML, CSS, PHP, C/C++, Java, MySQL, MATLAB.
>> **Operating Systems:** Windows 10, Ubuntu, ROS, RaspberryPi OS.
>> **Software:** Adobe Lightroom Classic, Premiere Pro, Photoshop, Microsoft Office, Affinity Designer.

COMMUNITY INVOLVEMENT

Video Director // Bishop McGuinness Catholic High School   November 2019, 2020
>> Directed and produced short promotional videos to be displayed before varsity basketball games during the season.
>> Communicated with coaches, players, and parents to create a high-quality product within a 72-hour period.

Parish Member // Saint John Catholic Student Center   August 2018 - Present
>> Participate in liturgical services, bible study groups, retreats, and social events that occur throughout the school year.

Club Member // Gamers of Oklahoma State University   August 2018 - Present
>> Compete in intercollegiate video game tournaments.

Volunteer Livestream Operator // Christ the King Catholic Church, Oklahoma City, Oklahoma   May 2016 - June 2019
>> Manipulated cameras and monitored livestream output to assist parishioners who could not regularly attend services.
>> Instructed peers how to operate audio/video equipment and examine the output stream.

AWARDS

Computer Science Endowed Scholarship // Oklahoma State University   August 2021
>> Departmental scholarship awarded at the start of senior year based on exceptional academic performance.