3334 Gambel Oak Ct Oviedo, FL, 32766

February 18<sup>th</sup>, 2025

To whom it may concern,

I am writing to you today to apply for the Backend Software Engineering Intern position that you have posted on the University of Central Florida's Handshake platform. With my programming experience and technical knowledge related to the degree I am pursuing, I am highly qualified to join the organization's work as an intern.

In previous coursework, I have built small projects in C, Java, and Python. Each of these projects has given me the knowledge of the inner workings of the programming languages. In some class projects, as seen in the Python compiler and Java graphing solution, I have applied and practiced my knowledge of a variety of common algorithms seen in my courses and understandings of low-level system software. It can also be seen in projects not related to my coursework, such as the online personal training I have completed with Verizon to evaluate a certain software. Through that personal project, I have applied my knowledge of testing programs and software security to ensure that what the clients use is well-developed and secure.

Though not mentioned on the resume but can be seen in my GitHub, I have had a very recent experience working as a back-end software engineer. I and team of three other people, for a class project, developed a full-stack web application using MySQL, PHP, JavaScript, HTML, and CSS. As the REST API endpoint developer, I had to understand the inner workings of MySQL, PHP, and JavaScript, to successfully provide back-end functionality for the web application. The JSON sent to API endpoint made by me in PHP was to be translated to a SQL query for the MySQL database. By understanding what was going to and from the API endpoint, I successfully provided my team a way to communicate to the database while maintaining basic programming security.

As a backend software engineering intern at U.S. Hunger (Feeding Children Everywhere), I hope to both assists building the software functionality that you need and gain experience through that process. I welcome the chance to discuss my qualifications with you in greater detail. Please do not hesitate to contact me by email or by phone, which are both listed on my resume. Thank you for your time and consideration.

Sincerely,

Carla McBurnie.