

NIKLAAS COTTA

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Software Developer bringing creative problem-solving and adaptability to both front and back-end roles, with particular experience in software engineering, infrastructure/DevOps, and networks.

EXPERIENCE

JUNE 2021 – SEPT 2021

INFRASTRUCTURE/DEVOPS INTERN, CDK GLOBAL

- Developed several automation tools in Python to compile and display diagnostic information and metrics from AWS, load-balancers (F5), and network
- Optimization and integration of ticketing systems and digital workflow management
- Developed knowledge in cloud infrastructure, CI/CD pipelines, and software lifecycle

SEPT 2021 – SEPT 2022

TECHNOLOGY ANALYST, UNIVERSITY OF OREGON

- Assisted students and staff with IT issues involving credentials and accounts
- Updated and refactored Confluence articles to increase productivity
- Worked closely with Information Security for threat mitigation

EDUCATION

JUNE 2022

COMPUTER AND INFORMATION SCIENCE, UNIVERSITY OF OREGON

- B.S., 3.8 GPA, Dean's List for several terms
- Developers Club Vice President, Women in Computer Science
- **Courses:** Linear Algebra, Algorithms, Data Structures, Operating Systems, Scientific Visualization, Game Programming, Computer Networks, Computer Security

SKILLS

- **Languages:** Python, Java, C/C++, C#, HTML/CSS, JavaScript, TypeScript, SQL, Kotlin
- **Tools:** AWS, AngularJS, Bash, MongoDB, Git, Jira, Visual Studio, Unity

PROJECTS

Fitness Companion Web App (APIs, MongoDB, UI, Python, HTML/CSS/JavaScript)

- A companion app/motivation assistant that surveys a user and provides a tailored workout routine. Sends notifications and motivational messages, and allows the user to track their progress visually via a creature.

SecureRFID (Android Dev, Application Security/Protocols, Kotlin)

- An android application that uses NFC technology to send and receive information via the RFID chip found on most modern credit cards.

RPG Character Creator (C++)

- A text-based character creator that allows a user to create a fantasy character based on inputs. Also includes turn-based battles between randomly-generated foes and the player character.

Star Explosion Volume Renderer (C++, Cmake, VTK, Data Visualization)

- A volume renderer that reads a large dataset of an exploding star and creates a 3d model, using ray-casting, interpolation, and volume intersection

Banking System (Multithreading, Concurrency, Linux System, C)

- A multi-threaded banking system that processes many account accesses/transactions concurrently, fed through an input file. System calls are used to implement mutex locks and avoid race conditions/deadlocks

Deschutes and Ladders (Game Programming and Design, Unity, C#)

- A game built in Unity3D that incorporates puzzle and platformer elements