# **Beckett Dunlavy**

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### **EDUCATION**

## University of New Mexico

Albuquerque, NM

Majors: Computer Science (Engineering) and German (Arts & Sciences), GPA: 4.14/4.0

Aug. 2022 - Present

- Awards: Dean's List (6 semesters); Woodward Scholarship (4 years)
- Relevant Courses: Design of Large Programs, Mathematical Statistics, Computer Logic and Design, Linear Algebra, Calculus I/II, Numerical Computing, Parallel Processing, High Performance Computing, Algorithms 1
- Spring 2026: Computer Architecture and Design, Algorithms 2, Software Engineering, Physics 1

Freie University

Berlin, Germany

European Studies Program, Intensive German Language Program (B2/C1)

Aug. 2024 - Dec. 2024

Google Cybersecurity Professional Certificate

Coursera Online

8-course cybersecurity certification program

June 2024

#### EXPERIENCE

Research Assistant

May 2025 – Present

UNM Department of Computer Science

Albuquerque, NM

- Benchmarked hypre AMG solver on DeltaAI
- Coded in C++ to send data form CPU to GPU on grace-hopper chips
- Developing a paper on a method to determine where each level of an AMG solver should run (cpu/gpu)

## Faculty Assistant

May 2024 - Aug. 2024

UNM Department of Computer Science

Albuquerque, NM

- Created a curriculum to teach Git/GitLab to incoming and enrolled CS students
- Produced educational YouTube videos teaching the curriculum
- Taught curriculum to undergraduate students (intro to upper-level) in computer science courses

#### Teaching Assistant

Jan. 2024 – May 2024

UNM Department of Computer Science

Albuquerque, NM

- Assisted in teaching duties for Intermediate Programming (CS 251) section with 18 students
- Led weekly lab sessions, helped students with content understanding, graded homework
- Hosted weekly office hours, helping students 1-on-1 with homework and programming assignments

#### **PROJECTS**

#### Word Search Solver | Java, Data Structures

GitHub: BeckDun

- Developed a program to solve Word Search puzzles using trie data structure as dictionary
- Implemented efficient search algorithms for pattern matching

#### LCG Cipher | Java, Cryptography

GitHub: BeckDun

- Created a Linear Congruential Generator for text encryption and decryption
- Implemented cryptographic algorithms for secure data transmission

### Student Cluster Competition | HPC, Linux, C++

Jul. 2025 - Present

- Collaborated with team to optimize applications on VMs ran on Jetstream2 could system.
- Built and ran climate applications across multiple nodes using slurm

#### UNM App Contest | Full stack development

Aug. 2025 – Present

• Create an app to promote and grow community and local business interaction

## TECHNICAL SKILLS

**Languages**: Java, C/C++, Python

Tools & Technologies: Git, Linux, MacOS, Windows, Microsoft Office Suite, Google Workspace

Creative Software: Premiere Pro, Logic Pro, After Effects, Photoshop, Illustrator