

# GRACE LYTLE

Website [GraceLytle.Tenacious3.com](https://GraceLytle.Tenacious3.com) | Github [GraceLytle](https://github.com/GraceLytle) | (208) 891-7331 | [Grace@Tenacious3.com](mailto:Grace@Tenacious3.com) | Boise, ID

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## EDUCATION

### Bachelor of Science in Computer Science, Emphasis in Cybersecurity

### Master of Science in Cybersecurity, Emphasis in Computer Science

Boise State University

- Bachelor's Completion May 2025 | Master's Completion May 2027
- **CyberCorps®: Scholarship for Service Scholar** Federally Funded by The National Science Foundation
  - **One in a cohort of five at Boise State University**
- Cumulative GPA: 3.4 | Computer Science GPA: 3.67

### Bachelor of Arts in Multidisciplinary Studies

### Minor in Music, Emphasis in Trumpet Performance

Boise State University | May 2019

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## SKILLS

### Programming Languages

Java (Advanced), Python (Advanced), C# (Advanced), SQL (Intermediate), C/C++ (Intermediate)

### Web Development Languages

HTML (Advanced), CSS (Advanced), JavaScript (Int.), Pug (Adv.), Go (Adv.), SQL (Int.), Node.js (Int.), React (Int.)

### Cybersecurity & Development Tools

Stellar Cyber (SIEM), Confluence, Jira, Fiddler, Microsoft Office Suite, Chrome Developer Tools, FileZilla, LaTeX

### Integrated Development Environments

Microsoft Visual Studio, Visual Studio Code, IntelliJ IDEA, SQL Management Studio, Jupyter Notebook, Anaconda, Vi Editor

### Operating Systems

Windows, Linux

### Soft Skills

Public Speaking, Presenting, Performing Music on Stage, Grant Writing, Project Management, Collaboration, Conflict Resolution

## CYBERSECURITY APPLIED LEARNING

### Institute for Pervasive Cybersecurity | August 2024 – Current

Part of a collaborative cybersecurity team that works to mitigate security risks for small companies in rural Idaho

- Utilized Stellar Cyber SIEM tool for log aggregation, incident correlation, and escalation
- Managed cybersecurity documentation and workflow guides in Confluence
- Handled service tickets and incident tracking through Jira

### Cryptography

Python scripting using SageMath

- RSA and ElGamal encryption and decryption
- RSA public key attacks, including Fermat, Initial Segment, One Line, GCD, and Pollard P-1

### CompTIA Security+ | Completion December 2024

### PortSwigger Server-side Vulnerabilities Course

Introduction to various types of vulnerabilities, including how attackers identify and exploit them in real-world systems

- Path Traversal, Access Control, Authentication, Server-side Request Forgery (SSRF), File Upload Vulnerabilities, OS Command Injection, SQL Injection

Course site: <https://portswigger.net/web-security/learning-paths/server-side-vulnerabilities-apprentice>

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## PROJECTS

### Artificial Intelligence ML-based Detection of Cyber Attacks | October 2024

Applied Random Forest, Decision Tree, Artificial Neural Networks, and Support Vector Machines to phishing detection, network intrusion, and Android malware datasets from Kaggle

- Conducted 10-fold cross-validation with parameter optimization
- Analyzed errors using unsupervised clustering to identify misclassification patterns and iterated on parameter settings to maximize model performance

Source code: <https://github.com/GraceLytle/CS597-CyberAI-PI>

### Security and Cryptography RSA Key Generation Challenge | December 2023

Developed a robust public RSA key that resisted attacks in a cryptography challenge

- Successfully utilized Python scripting in SageMath to perform RSA key analysis on classmates' public keys
- Identified and iterated over classmates' public keys weaknesses, cracking three other RSA keys using Fermat's attack

Portfolio site: <https://gracelytle.tenacious3.com/#portfolio>

### BauerMusicStudio.com | June 2021 - Current

Developed, built, and maintain a custom Azure static app

- Leveraged cloud infrastructure for efficient, scalable performance ensuring fast content delivery for the customer
- Utilized Hugo static site generator with templating in Go and integrated Formspree for seamless form management

### BeMyValentine.tenacious3.com | February 2024 - Current

Developed, built and maintain a custom React site hosted as an Azure static app

- Designed and implemented reusable components for UI elements to ensure scalability of the codebase
- Managed state and event handling efficiently to create dynamic, responsive user experiences

### GooseCreekCoffeeRoasters.com | March 2024

Built a Custom Shopify Site

- Customized Shopify themes and templates to align with brand identity and provide a unique, user-friendly interface
- Implemented Shopify apps and plugins to manage inventory, handle payments, and streamline the purchasing process

### JMB-INS.com | July 2022

Created a Custom Square Space Site

- Customized site templates and layouts to reflect the brand's identity, ensuring a cohesive and visually appealing design
- Integrated contact forms, SEO settings, and analytics tools to enhance user engagement and track site performance

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## LEADERSHIP & TEAM EXPERIENCE

### Boise State University Artificial Intelligence for Cybersecurity Club | August 2024 - Current

Treasurer and Event Coordinator

Exploring the intersection of AI and cybersecurity

- Collaborated as a club to train and launch a Large Language Model (LLM) using PyTorch, gaining hands-on experience in deep learning frameworks and model deployment

### Brass Band of the Treasure Valley | August 2022 - Current

Section cornet player for Idaho's premier British brass ensemble

### Boise State University Trumpet Club & Ensemble | August 2016 - May 2018

President of the BSU Trumpet Club & Ensemble

- March 2018, coordinated event and wrote grant to obtain funding for Tom Hooten, Principal Trumpet of the LA Philharmonic, to visit the BSU Music Department

### Keith Stein Blue Thunder Marching Band | August 2014 - May 2018

A trumpet player in the Blue Thunder Marching band for BSU

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## WORK EXPERIENCE

My diverse work experience has equipped me with strong interpersonal, leadership, and problem-solving skills. I have excelled in customer-facing roles, collaborating with teams and managing responsibilities under pressure. These roles have strengthened my communication, adaptability, and ability to think critically, all of which I bring to my professional pursuits in cybersecurity, AI and computer science.

### **Bartender | The Gas Lantern Drinking Company**

February 2021 - October 2021 | Part-time 10 - 20 hrs.

### **Bakery Clerk | Albertsons on Broadway**

October 2018 - May 2019 | Part-time 20 - 30 hrs. | October 2019 - May 2020 | Full-time

### **Packaging Technician | Mother Earth Brewing Company**

May 2019 - September 2019 | Full-time

### **Bartender & Staff | Alibi Industries**

April 2018 - May 2019 | Part-time 20 - 30 hrs.

### **Sales Associate | Old Navy**

June 2017 - May 2019 | Part-time 10 - 20 hrs.

### **Home & Garden Associate | Fred Meyer**

May 2016 - June 2017 | Part-time 20 hrs.

### **Principal Trumpet Player | All Saint's Presbyterian Church**

November 2014 - May 2019 | Part-time 3 hrs.

### **Shift Manager | Papa Murphy's**

August 2014 - April 2018 | Part-time 20 - 30 hrs.

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## AWARDS

### **CyberCorps®: Scholarship for Service Scholar** Federally Funded by The National Science Foundation

June 2024 - Current

One in a cohort of five students at Boise State University to be accepted into this scholarship program

### **Lightfoot Foundation Scholar**

August 2022 - May 2025

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## REFERENCES

### **Distinguished Professor Marion Scheepers**

Professor of Mathematics

(208) 426-1033 | [mscheepe@boisestate.edu](mailto:mscheepe@boisestate.edu)

### **Professor Andre Keys**

Clinical Professor of Computer Science

(208) 426-5766 | [andrekeys@boisestate.edu](mailto:andrekeys@boisestate.edu)

### **Professor Shane Panter**

Clinical Assistant Professor of Computer Science

(208) 426-3317 | [shanepanter@boisestate.edu](mailto:shanepanter@boisestate.edu)

### **Dr. Derek Ganong**

Assistant Professor: Trumpet, Director of Jazz Studies

(208) 604-4299 | [derekganong@boisestate.edu](mailto:derekganong@boisestate.edu)

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