

# JONATHAN GIANG

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## EDUCATION

**San Diego State University**  
*Bachelor of Science, Computer Science*

**Expected Graduation: May 2021**

### Relevant Courses

- Data Structures
  - Assembly Language
  - Computer Architecture
  - Systems Programming
  - Algorithms and Their Analysis
  - Operating Systems
  - Database Theory
  - 3D Game Programming
  - Computer Security
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## PROJECTS

**AES Implementation (Python)** **February 2021**

- Python program created to implement AES-128 ECB encryption, the standard for data encryption in the US
- Accepts a 16-byte plaintext and a 16-byte secret key and outputs the corresponding ciphertext
- Demonstrates comprehensive understanding of the encryption algorithm and key expansion process

**Castle Siege (Unity, C#)** **December 2020**

- 3D game with the objective of destroying tower structures, designed in the Unity environment with C# scripting
- Implementation of level design, 3D graphics and animations, quest logging, and badge rewards
- Collaborative team effort involving the use of GitHub version control

**Graph ADT Implementation (Java)** **November 2019**

- Built a Java application that implements the directed graph ADT through the use of HashMap's
- Parses a CSV file containing ordered pair and weight information and uses the information to create a graph
- Analyzes characteristics of the graph's vertices and edges and writes the characteristics to an output file

**Transaction Tracker (Java, SQL)** **October 2019**

- Developed a Java application that records transaction history, aimed at assisting financial management
  - Allows the user to create, remove, or edit entries, filter and view entries, and display total or monthly net income
  - Utilization of Java Database Connectivity (JDBC) and SQL to store transaction information in a local SQL database
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## EXPERIENCE

**85C Bakery Cafe** **November 2018 – Present**  
*Store Front*

- Worked in a fast-paced environment, helping several hundred customers daily
- Processed transactions, made drinks, stocked bread and cake displays, and maintained store cleanliness

**Vietnamese Student Association** **May 2017 – May 2018**  
*Activities Coordinator*

- Organized and monitored social events and activities to attract and engage club members
  - Coordinated the "ACE" Mentorship Program, increasing club-member retention by 25%
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## SKILLS

- Java
- Python
- C/C++/C#
- UNIX
- SQL
- HTML/CSS
- Adobe Suite (Photoshop, XD)
- Microsoft Office Suite
- Unity