

Fannng Dai

Fannydai.me

EDUCATION

Stony Brook University

Bachelor of Science in Computer Science

Relevant Coursework:

Data Structures

Software Design

Assembly Programming

Database

Scripting Languages

Expected Graduation: May 2019

Magna Cum Laude

Advanced C programming

Internet Programming

Analysis of Algorithms

EXPERIENCES

Stony Brook

University

Stony Brook, NY

Jan 2019 –

May 2019

Web Intern

- Updated, proofread, checked the college's website as necessary.
- Exercised problem-solving and creative skills to improve web performance.
- Assisted with web site management and updates as necessary along with editorial projects.

Stony Brook

University

Stony Brook, NY

Aug 2018 –

May 2019

Computer of Engineering and Applied Science Tutor

- Tutored 7 distinct courses which include procedural and object-oriented programming methodologies in Java, data structures, foundation of computer science, software design, assembly programming, theory of computation, and scripting languages.

Stony Brook

University

Stony Brook, NY

May 2017 –

May 2019

Teacher Assistant

- Tutored students on the procedural and object-oriented programming methodologies in Java and principles of programming languages.
- Collaborated with professor and other teaching assistants to evaluate labs, hundreds of exams, and wrote scripts to grade homework.

Vedia

New York, NY

July 2018 –

Aug 2018

Web Developer Intern

- Developed front-end web application using React, JavaScript, Express, Node.js, and Postgres.
- Collaborated closely with co-interns to understand and build what is needed to enable a delightful web developer experience.

Stony Brook

University

Stony Brook, NY

Sept 2017 –

May 2018

WISE Program Assistant

- Supported the communications, event planning, and research needs of the entire team.
- Assisted office team with support of students, planning campus events, and special programming.
- Used internet to gather information needed to enhance department datasets.
- Aided department in maintaining accurate datasets for reporting.

Stony Brook

Tabler Arts

Center

Stony Brook, NY

May 2017 –

Aug 2017

Student Assistant

- Knowledge of camera and lighting techniques.
- Transport, assemble, maintain and repair equipment used in multimedia production.
- Ability to adjust sounds during live performances to achieve optimal quality.
- Maintained the entire building, especially when activities are being held within the building.

Queens

College

Library

Flushing, NY

Sept 2016 –

Dec 2016

Library Clerk

- Worked with electronics (camcorder, calculator, iPad, laptops, etc.) and books to ensure all products are functional upon return.
- Worked and coordinated effectively with co-workers and collaborate on a daily basis.
- Assured accuracy in library shelving of all materials.
- Completed customers' needs while maintaining high accuracy and service.

PROJECTS

- Java, Jotto**
MongoDB, Angular 6, Spring Boot • A master mind game for guessing a secret word between a user and bot.
Feb 2019 – March 2019 • Programmed an algorithm which takes an average of 22 guesses per game.
• Capable of allowing user to register for an account, play new game, and show all previously played games.
- C Xacto (Server, Socket programming)**
Dec 2018 • Utilized thread execution, locks (POSIX threads), semaphores, and multithreading in order to avoid deadlock and livelock.
- C Imprimer (Printer Spooler)**
Nov 2018 • Requests to queue files for printing, cancel printing requests, pause and resume print jobs, show the status of printers and print jobs, and set up pipelines to convert queued files of one type to the type of file accepted by an available printer.
• Utilized Forking, executing, reaping childrens, processes, signal handling, files, and I/O redirection
• Implemented breadth first search
- C Sfmm**
Oct 2018 • A working replica of explicit free list memory allocator using immediate coalescing and best fit placement policy.
• Supported boundary tags with footer optimization that allows footers to be omitted from allocated blocks along with block splitting without creating splinters.
• Allocated blocks aligned to “double memory row” (16-bytes) boundaries.
• Maintained a free list using last in first out (stack) discipline.
- C MIPS Converter**
Jan 2018 • Command line utility to translate MIPS machine code between binary and human-readable mnemonic form.
• Checked for valid arguments from the terminal and store their definitions accordingly.
- Python Stony Brook Script**
June 2018 • A compiler which tokenizes and parses statements to build an Abstract Syntax Tree using PLY (Python Lex and Yacc) library.
• Allowed users to assign variables, perform unary and binary operations, and utilizes conditions.
- JavaScript, HTML, CSS, Bootstrap, Dawweee**
Feb 2018 • Helped users destress by showing them neatly structured photos of dogs and allowing them to contact the owner for a meet up.
• Used a library that allows user to upload photos and checks to ensure photos are actual photo of dogs.
- JavaFX, CSS, Metro Map Maker**
JSON • Helped map makers build graphical representations of public transportation systems with names lines, names stopes, and intersecting lines and landmarks.
Oct 2017 – Dec 2017 • Supported shapes and text insertion along with dragging shapes(objects), modifying shapes, zooming, path finding between stations, saving/loading, export/import, distance/time calculation between stations and other various tools for ease of use.
• Incorporated design patterns (singleton, factory, builder, strategy, memento).
- MIPS 2048**
Assembly • Built an interactive game that shifts, merges, simulates a user move, and checks game state.
Nov 2017 • Adjustable board size according to users’ preference.

- JavaFX, CSS, JSON**
Oct 2017
- goLogoLo***
- Ability to swap between two languages (English and Chinese).
 - Supported editing objects to change their color, outline color, and outline width, and shapes and text insertion that can be dragged within designated boundaries.
- JavaFX, CSS, JSON**
Sept 2017
- HTML Builder***
- Gave the user available buttons which is used to make a html diagram.
 - Adjustable text, style, and id for each HTML tag.
 - Ability to copy, cut and paste the tags accordingly.
 - Visible CSS tab which can be used to edit and updates the HTML frame directly.
- Java, JavaFX**
July 2017 – Aug 2017
- Projects using Data Structures***
- Playlist - Used an array list coded from scratch to build a playlist which would record song information.
 - RFID (Radio-frequency Identification)- Used a linked list coded from scratch to build a RFID which would store a product information such as the name and tags. Finds the product and inform the user the location of the product and amount in stock.
 - Versatile Decision-making System - Used linked list and algorithm of trees. Able to read a file in a certain format which would then run and ask the user questions based on the file and reply in according to information in the file provided.
 - Email like Program - A program which the user is able to send email (not connected to server) and look at their multiple folders. Sort the emails by date and subject descending and ascending.

SKILLS

Program	Java, Python, MIPS Assembly, C, Perl, Bash, C++, JavaScript (ES6), SML, Prolog
Web	HTML, CSS
Tools	Eclipse, NetBeans, Mars, VMWare Fusion, GIT, Spring
Linguistics	English, Chinese (Mandarin & Wenzhounese)