

# Aidan Jones

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## Objective

Adaptive Computer Science graduate finishing with a 3.35 GPA looking for an introductory programming position at a growing tech firm. Looking to apply problem-solving skills and new eyes to business problems.

## Profile

- Constructed robust OS level functions such as drivers, process schedulers, and memory allocation
- Managed large workloads, with teams of 10 people, that required interdependence and trust in colleagues.
- Streamlined User Interface for Flight Scheduler Database Client to allow user to complete tasks in 3 or less mouse clicks.
- Implemented ray tracer using Phong Illumination that includes reflection and refraction.

## Education

BACHELOR OF SCIENCE | THE PENNSYLVANIA STATE UNIVERSITY | AUG 2015 – DEC 2019

- Major: Computer Science
- GPA: 3.35/4.0

## Career Experience

### SEED EXCHANGE IOS APP

- Account based and user focused design
- Provides space for user-user interactions to exchange seeds
- Backend is built upon AWS DynamoDB using Low-level API
- Joint project with my father who does database design

### MAP MOBILE APPLICATION

- iOS Mobile App for iPhones
- Utilizes custom pins for buildings across Penn State Main Campus
- Provides directions between buildings and step by step instructions

## MEMORY ALLOCATION

- Slab allocation algorithm with custom data structures
- Customized malloc and free functions that use the slab data structure
- Defends memory in the form of canaries, free count tracking, and type checking

## LOW LEVEL CALCULATOR

- Developed on embedded system with assembly language
- Takes user input from terminal over serial connection
- Provides Realtime clock using interrupts

## RAY TRACER

- Ray traces backwards shooting rays from the eye position
- Draws hard-edge shadows for each non-blocked light source
- Includes reflection and refraction rays for shiny and translucent objects.

## FLIGHT SCHEDULER DATABASE INTERFACE

- Interfaces with Java Derby Databases and employs SQL queries
- Provides clean UI with multi-tabs to differentiate user options
- Implements real-time reporting of user actions and query responses

## Additional Work History

HOST	PUMPERNICK'S DELI	MAY 2015 – AUGUST 2015
LIFEGUARD	PSC INTERNATIONAL	2016 – 2018 (SUMMERS)
LINE WORKER	IMPACT THRIFT	JUNE 2018 – AUGUST 2018

## Skills

- Programming Languages: Java, Python, C/C++, C#, OpenGL, SQL, Swift, iOS, GitHub