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DANIEL ZHENG

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EDUCATION

Pittsburgh, PA University of Pittsburgh

August 2016-May 2020 (Expected)

B.S. Computer Engineering, projected minors in Mathematics and Linguistics. Cumulative GPA: 4.0

Relevant Coursework

- Ongoing: Data Structures Computer Organization and Assembly Language, Linear Systems and Circuits, Digital Logic, Linguistics, Advanced Engineering Applications for Freshmen, Machine Learning by Andrew Ng (Coursera), Android Development (Udacity)
- Completed: Linear Algebra, Differential Equations, Honors Engineering Analysis, Physics 2, Principles of Scientific Reasoning, AP Computer Science, AP Physics C Mechanics, AP Physics C Electricity and Magnetism, AP Calculus BC, AP Statistics

WORK EXPERIENCE

Undergraduate Research Assistant

University of Pittsburgh

January 2017-Present

Pittsburgh, PA

• Member of particle physics research group run by Dr. Tae Min Hong. Working on software for the ATLAS detector at the Large Hadron Collider run by CERN. *C++/Python/ROOT*.

Director's Assistant

NJ Workshop for the Arts

Summer 2014 and 2015

Westfield, NJ

• Took inventories of, cleaned, and tuned instruments and performed various clerical tasks (filing, photocopying).

Web Coordinator

Taubman Piano Festival

2013-Present

Montclair, NJ

• Created and sent emails to piano teachers and students worldwide, maintained website and social media.

ACTIVITIES

- Computer Science Club/Member (2016-Present): Tech talks, networking, computer science discussion.
- **Robotics and Automation Society/**Member(2017-Present): Working on autonomous quadcopter for the International Aerial Robotics Competition.
- Design Hub/Member (2016-Present): Weekly tech workshops (breadboarding, Raspberry Pi, etc.)
- Society of Physics Students/Member (2016-Present): Weekly meetings discussing physics topics.

TECHNICAL EXPERIENCE

Projects

- Diagnose Me -Amazon Alexa skill that serves as a virtual medical assistant. Can send an emergency text message, give dosage information for O.T.C. medication, and perform preliminary medical diagnosis given symptoms. First Prize at the 2017 Pitt Challenge, a Pitt's healthcare hackathon. *Node.js and AWS Lambda*.
- Contact Me(https://goog.gl/z8DhM8)-Android app that uses Java binding of Google's Tesseract OCR SDK. Converts picture to text that can be copied to clipboard, will eventually extract and save contact info to convert business cards to phone contact. Made at MHacks 8. Java, Android Studio.
- ConvertBase(https://goo.gl/Twbwip)-Base converter, also supports fractional numbers. Python.
- **SudokuSolve**(<u>https://goo.gl/ZSxMB3</u>)-Solves Sudoku through recursive backtracking. *Java*.
- Blackjack(https://goo.gl/meYBME)-Single player blackjack complete with GUI and multiple decks. MATLAB.

Summer Programs

• NJ Governor's School in the Sciences (Summer 2015): Selective state-funded summer program of 85 top math and science students. Classes in math, computer science, neurobiology, special relativity. As part of an eight-person team, completed an image recognition algorithm from scratch in MATLAB, wrote a research paper, and presented findings.

AWARDS

- Merck James J. Kerrigan Scholar (2016): One of 10/40 recipients nationwide to receive four-year scholarship.
- National AP Scholar (2016): Averaged score of 4 or higher on at least 8 AP Exams. Scored 5/5 on all AP Exams.
- Presidential Scholar Candidate (2016): U.S. Presidential Scholars Program, U.S. Department of Education.
- Pitt Full-Tuition Scholarship (2016): Scholarship covering four years of tuition at the University of Pittsburgh.

LANGUAGES AND TECHNOLOGIES

Intermediate: Java | C++ | MATLAB | Office | Windows | Linux

Basic: Python | HTML | CSS | Javascript | Git | Visual Studio | Android Studio | ROOT