# Jay Facultad

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#### **EDUCATION**

#### **TUFTS UNIVERSITY**

Post-Baccalaureate Minor, Computer Science, January 2019

# UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Bachelor of Science, Biology, June 2008

#### LANGUAGES

- C
- C++
- Python
- Assembly for x86-64
- HTML
- CSS
- JavaScript
- C#

## **SOFTWARE / OTHER SKILLS**

- Git
- Github
- Emacs
- Kali Linux
- Wireshark
- JSON
- XML
- jQuery
- Node.js
- MongoDB
- .NET
- Cyber Security

#### **CERTIFICATIONS**

Advanced Excel, 2018

#### **AWARDS**

Employee of the Quarter, Genentech, Q4 2012

#### **PROFESSIONAL SUMMARY**

Recent computer science graduate seeking role in software development and software engineering.

#### **RELEVANT COURSEWORK**

Data Structures, Algorithms, Discrete Math, Machine Structure and Assembly Language, Computer Systems Security, Web Development

## **PROJECTS**

Boggle: game that utilizes DFS and trie trees. jayfacultad.com/boggle
Boston Subway: web app utilizing Google API. jayfacultad.com/bostonsubway
Fuzzer: program that detects website cross-site scripting vulnerabilities.
Incident Alarm: program used to analyze a live stream of network
packets or a set of packet captures. Able to detect NULL, FIN, Xmas
scans, as well as username and passwords sent in the clear via HTTP or
FTP. Implemented with Python and Scapy.

**Unblack Edges:** program that removes black edges of scanned images. **Sudoku Solver:** program that determines completeness and correctness of submitted Sudoku puzzles.

**Image Rotation:** program that rotates images 90°, 180°, and 270°, as well as flips images vertically and horizontally.

**Image Compressor and Decompressor:** program that performs bitwise manipulations on image files to compress image file sizes.

**Universal Machine:** program that inputs universal machine instructions (14 total types) and utilizes registers to execute the instructions.

**RPN Calculator:** program emulating a Reverse Polish Notation calculator.

#### **WORK HISTORY**

Compliance Specialist Cambridge, MA
Shire / Takeda May 2014 – January 2018

- Reduced average investigation report cycle time from 33 to 10 days.
- Reduced backlog of overdue excursion reports from 170 to 0.
- Increased department report on-time closure rate from 7% to 100%.
- Revised Standard Operational Procedures and Best Practices to improve work stream cycle times.
- Eliminated work stream delays in drug product lot release.

# Microbiology Laboratory Associate Lead Genentech / Roche

San Francisco, CA June 2009 – May 2013

 Executed microbiology assays to ensure ongoing quality of pharmaceutical drug products as well as evaluated, reviewed, and approved data.