

# Jay Facultad

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[jayfacultad.com](http://jayfacultad.com) (website and portfolio)

## EDUCATION

### TUFTS UNIVERSITY

Post-Baccalaureate Minor,  
Computer Science,  
January 2019

### UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Bachelor of Science,  
Biology,  
June 2008

## LANGUAGES

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

## SOFTWARE / OTHER

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

## CERTIFICATIONS

Advanced Excel, 2018

## AWARDS

Employee of the Quarter,  
Genentech, Q4 2012

## PROFESSIONAL SUMMARY

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

### RELEVANT COURSEWORK

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

### PROJECTS

**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 detects and removes black pixel 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 that emulates 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

San Francisco, CA

Genentech / Roche

June 2009 – May 2013

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