

**Jacob Alexander Della**

Glen Arm, MD; 443-763-1736; Jdella11@students.towson.edu; github.com/JDella1996; gitlab.com/JDella1996; www.jdella1996.net

**Technical Skills:**

- Programming Languages: Java, Kotlin, JavaScript, Python, LUA \ Expression2, C, C++, SQL
- Mark Up Languages: CSS, HTML, XML, JSON
- Software: VIM, Windows, Eclipse Java IDE, PyCharm IDE, Dev-C++ IDE, iOS, Mac OS, Linux, Android Studio, QEMU/KVM, VMWare Workstation, VirtualBox, Git SCM, VSCode Text Editor, MySQL Workbench, Ansible

**Education:**

- Bachelor of Science in Computer Science & Minor of Science in Mathematics **12/19 - 12/20**  
Towson University, Towson, MD  
**3.34 GPA**
- Associate of Science in Computer Science **12/18**  
Community College of Baltimore County, Essex, MD

**Relevant Coursework:**

- Java Programming 1, Advanced Java Programming 2, Introduction to C++, Systems Development Lifecycle, Discrete Mathematics, Linear Algebra, Data Structures and Algorithms, Calculus 1,2, & 3, Object Oriented Design (Design patterns), Operating Systems, Web Development, Software Engineering, Computer Organization, Mobile Application Development, Programming Languages, Database Management Systems, Applied Combinatorics, Design and Analysis Algorithms, Data communication and networking

**Work Experience:**

**CAB ISM Co-Op – 40 Hours / Week – Full Time**

UPS, Timonium, MD

**01/21 – Present**

- Implementing OAuth 2.0 via Spring Boot to secure service-to-service communication

**CAB ISM Intern – 40 Hours / Week – Full Time**

UPS, Timonium, MD

**06/20 – 08/20**

- Developed Ansible playbooks to streamline numerous application deployments on production servers
- Configured Prometheus, Grafana and Netdata on 120+ hosts using Ansible to display important metrics on servers and provide host visibility
- Effectively coordinated software deployments with supervisors and managers
- Diagnosed and corrected issues during deployments using Ansible playbooks
- Developed Python scripts to generate inventory files for Ansible
- Implemented Prometheus queries for use in Grafana
- Wrote programs to sift through Apache logs to figure out redirect issues in production environment.
- Configured user groups, dashboards, alerts, and notification services in Grafana
- Developed time saving Ansible playbooks for support team to streamline Tomcat application security patching

**IT Help Desk – 24-30 Hours / Week – Part Time**

Hamel Builders, Elkridge, MD

**02/19 – 05/20**

- Effectively troubleshooted and resolved issues on user systems.
- Researched and investigated IT solutions to make turnaround time on common issues as fast as possible.

**Assistant Superintendent / Project Engineer Intern – 24-30 Hours / Week – Part Time**

Hamel Builders, Elkridge, MD

**05/16 – 02/19**

- Supervised subcontractors on site and reported information and/or issues to upper management to have them resolved
- Documented the work being completed on site
- Generated paperwork and spreadsheets to streamline various jobsite activities, such as expense reports and daily sign in
- Demolished various interior sections of building according as called out for in the architectural drawings

- Performed on-site IT work, troubleshooting and diagnosis of on-site computer systems and peripherals
- Monitored jobsite safety and OSHA compliance, issued tickets to subcontractors violating CFR 29 1926 guidelines
- Recorded expenses incurred and generated purchase orders and expense reports

#### **ADC Attendant – 16-24 Hours / Week – Part Time**

Goodwill Industries, Nottingham, MD

**12/14 – 05/16**

#### **Applied Projects:**

Image\_R Android App: [https://bitbucket.org/jdella11/image\\_r/src/master/](https://bitbucket.org/jdella11/image_r/src/master/)

**03/20 – 05/20**

- Fully functioning, basic image processing application for Android devices on API 29
- Can rotate, recolor, resize, crop and save images to device storage
- Utilizes multiple SQLite databases to store settings and recently opened images
- Lead design of user interface, application and development
- Utilizes many asynchronous, multi-threading features found within Android such as coroutines and JobServices to perform actions in the background
- Designed user interface, created documentation, utilized design patterns and created instrumented Kotlin unit tests

Jdella1996.net: <http://www.jdella1996.net>

**02/20 - Present**

- Utilizes React front end to render out JSON data from an Express API
- Uses VirtualDOM and CSS for page transitions.
- Configured CNAME records and URL redirects utilizing Dynamic DNS

Full-stack Reddit clone: <https://github.com/tulachan/cosc484projct>

**09/19 – 12/19**

- Developed NodeJS endpoints and Express API to hook into MySQL database server for use with a React frontend.
- Configured, administrated users and designed schemas for project's MySQL database
- Managed and coordinated group effort to get project finished before deadline
- Deployed website inside a virtual machine using the Ubuntu 18.04 LTS on my home server.
- Utilized multiple Git branches to keep development inertia

Jag ID facial recognition system: <https://gitlab.com/jdella1996/jagid/>

**09/19 – 12/19**

- Lead the development of the API, database and general architecture of the application.
- Administrated and designed schemas for use in the project's MySQL database.
- Utilized PostMan to send POST and GET requests to test API features without finished Android app.
- JagID is designed to invoke Python scripts with arguments from within NodeJS and based on the outputs of the Python scripts the API will react in certain ways.
- This dynamically generates folders and upload endpoints based on user's ID as defined in MySQL upon login will SSH into a Raspberry Pi to control GPIO pins.
- Utilizes OpenCV and NumPy arrays for picture verification and training data creation.

Home Server Admin

**01/18 - Present**

- Designed network topology using mini office computers that tie into a central larger server to provide resources.
- Hosted, maintained, and administrated Docker containers for: SSH, OpenVPN AS, TeamSpeak, Minecraft, DynamicDNS, Source Dedicated, Plex, and MySQL