

# Kowalski, Analysis

---

**Team:** Tyler Johnson , Sarah Shealy , Cameron Nixon, Ansh Sawant, Jonathan Helms, Roy Ulrich III

**Student ID | email | phone number:**

Tyler Johnson: 801040496, [tjohn252@uncc.edu](mailto:tjohn252@uncc.edu), (203)-500-6788

Sarah Shealy: 801217845, [sshealy2@uncc.edu](mailto:sshealy2@uncc.edu), (704)-526-9951

Cameron Nixon: 801004009, [cnixon14@uncc.edu](mailto:cnixon14@uncc.edu), (704)-747-2132

Ansh Sawant: 801144000, [asawant4@uncc.edu](mailto:asawant4@uncc.edu), (919)-780-2715

Jonathan Helms: 800808430, [jhelms71@uncc.edu](mailto:jhelms71@uncc.edu), (704)-699-0682

Roy Ulrich III: 800062614, [vulrichii@uncc.edu](mailto:vulrichii@uncc.edu), (704)-762-0453

**Topic:** Bird detection & classification of common American birds

**Proposal:**

This project aims to create an application to detect the presence of a bird in a photograph then subsequently classify it into the following common American bird families: bald eagle, woodpecker, hummingbird, robin, owl, finch, blue bird, oriole, cardinal, flamingo, parrot, crow, parakeet, dove, falcon, crane, magpie, black bird, chickadee, blue jay, haron, turkey, etc.

This application analyzes an image as input then returns if the image contains a bird, and if so classifies it. The target audience for this application is for bird watchers, bird enthusiasts, ornithologists, and zoologists. Once the application classifies the bird, the user will be able to view information about the bird family including taxonomy, conservation status, and population distribution in the United States.

**Goals:**

1. Identify the presence of a bird in a given image
2. Verify the family of bird with % level accuracy
3. Provide an outline of the bird in a photo
4. Provide a link to the corresponding Wikipedia article and provide relevant information.

## Technology Demo:



# Jonathan Helms

jhelms71@uncc.edu | (704) 699-0682 | Charlotte, NC | [linkedin.com/in/jonathan-helms/](https://www.linkedin.com/in/jonathan-helms/) | <https://github.com/jhelms71>

## Summary

---

Current Computer Science student seeking internships for summer 2021. Experience working with technology to create various art projects shown in galleries. Former President of the Art of Light and Photography Club.

## Education

---

### University of North Carolina at Charlotte

BS in Computer Science, GPA: 3.4

Charlotte, NC  
August 2019– Expected December 2021

### University of North Carolina at Charlotte

BFA in Photography

Charlotte, NC  
August 2013– December 2017

## Skills

---

|                          |   |
|--------------------------|---|
| <b>Relevant Courses:</b> | Logics and Algorithms, Data Structures, Human–Computer Interaction, Linear Algebra, Probability & Statistics, Calculus I & II, Artificial Intelligence, Database Design, Software Engineering, Operating Systems & Networking, Mobile Application, Web Development, Computer Vision |
| <b>Programming:</b>      | Java, C, C++, SQL, Agile, Python, HTML, CSS, Android Studio   |
| <b>Adobe CC:</b>         | Photoshop, Illustrator, Lightroom, After Effects, Premier Pro   |
| <b>Soft Skills:</b>      | Analytical, Critical Thinking, Detail Oriented, Problem-solving   |

## Projects

---

### A\* Searching Algorithm

Fall 2020

Developed a Java program that allows the user to select 2 points in a grid and the shortest path between the points is found using the A\* searching algorithm.

### EMR Database

Fall 2020

Using MySQL, developed a database for a mock electronic medical record, which included 9 tables that had relations between them. Included various triggers to give functionality to the tables, with 10 queries to display information from them.

### Flight Finder Application

Spring 2020

Conducted usability studies by interviewing volunteers while they attempted to use applications for the first time. Wrote descriptions for 2 personas for potential users. Developed sketches for a travel mobile application, and created a digital mockup using Justinmind.

## Experience

---

### Amazon

FC Associate

Concord, NC  
June 2019– May 2020

- Developed methods to execute work more efficiently.
- Collaborated with large numbers of co-workers to distribute items.

### Belk

Web Content Administrator

Charlotte, NC  
September 2018 – December 2018

- Processed merchandise information for products uploaded to belk.com.
- Use Belk's Salsify system and Excel sheets to gather product information.

### Unique USA Inc.

Product Photo Editor

Fort Mill, SC  
February 2018 – August 2018

- Edited lifestyle photos with Lightroom and Photoshop for rugs.com, uniqueloom.com, and social media.
- Implemented a new organization system for files used by the editing team with Photo Mechanic.
- Interviewed and trained new candidates for editor positions

# Tyler Anthony Johnson

Mobile: (203)-500-6788 | Email: [johnson.tyler97@yahoo.com](mailto:johnson.tyler97@yahoo.com) | [LinkedIn](#) | [Github](#)

## Education

### University of North Carolina Charlotte

Expected Graduation May 2021

Bachelor of Science in Computer Science, Concentration in AI, Robotics, and Gaming, Minor in Russian - GPA: 3.26

### Asheville-Buncombe County Community College

Graduated May 2018

Associates of Arts in General Studies - GPA: 3.1

## Skills

- Object-Oriented Programming Languages and OOP Practices
- Full-Stack Web Development
- Data Structures, Software Engineering, and Mathematics
- Effective Communicator

## Work Experience

### Associate

*Food Lion*

Mar 2020 – Present

- Display exceptional customer service, including item scanning, bagging
- Perform cleaning and sanitation duties complying with company standards

### Crew Trainer / Crew Member

*McDonald's*

Oct 2016 – Present

- Provide crew training, including order taking, register application, order entry, customer service, and compliance with company policy
- Display exceptional customer service, including order entry, order fulfillment
- Perform cleaning and sanitation duties complying with company standards

### Private Math Tutor

*Self-Employed*

Jun 2015 – May 2018

- Assisted students with understanding concepts involving college-level mathematics
- Assisted students with homework assignments from their respective mathematics courses
- Assisted students with studying for tests

## Volunteer Experience

### Full-Stack Web Developer

*Sycamore Temple C.O.G.I.C.*

Jul 2020 – Present

- Assist in website design and feature creation for a responsive, promotional website
- Write, test, and debug HTML, CSS, JavaScript, and PHP code to build website based on design and features

### Sunday School Teacher

*Sycamore Temple C.O.G.I.C.*

Aug 2017 – Aug 2018

- Review biblical scriptures and teach comprehension and modern application
- Present class teachings to the church congregation

### Game Master

*UNC Charlotte*

Sep 2018 – Dec 2018

- Raised awareness of Alzheimer's disease and dementia by hosting pay-to-play tabletop role-playing games
- Moderated UNC Charlotte Guild's Role-Playing for Good
- Donated earnings to local dementia program

Cameron Nixon  
Phone: (704)-747-2132  
Email: [lizardnix@gmail.com](mailto:lizardnix@gmail.com)  
[LinkedIn](#)

## **EDUCATION**

University of North Carolina at Charlotte  
Bachelor of Science in Computer Science  
Charlotte, NC  
August 2017 – August 2021  
GPA: 3.292

## **Coursework:**

Logic & Algorithms, Data Structures and Algorithms, Computer Vision, Software Engineering, Artificial Intelligence, Machine Learning, Game Design, Adv Game Design

## **Experience:**

*People to People Ambassador Program (2015):* Spent one month in the UK, Scotland, Wales, and Ireland engrossing myself in the culture in a foreign exchange program. Participated in several community works projects designed to help the people such as cutting peat moss in a bog in Ireland to give to the elderly.

*Ormaza's Family Karate Competition Team:* Helped to mentor young kids for sparring matches held across the east coast and provide moral support in the ring.

## **Projects:**

*Housing Data Neural Network (Jupyter Notebook, Numpy, Pycharm, Python):* Created to find positive correlations between housing prices in Boston and a selection of attributes. Allows users to find what attributes drive up or down pricing costs in Boston and which attribute matters most to consumers.

- Utilized pandas API for dataframe organization.

*Slash (GameMaker Studio 2, GML):* Single player indie GM project in which player control a ninja in an attempt to navigate up a building by using quick movement in order to destroy enemies.

- Assigned as producer role for the project and coordinated team meetings and timelines.
- Worked as FX programmer, incorporating particle systems into the game.

*Deep Learning Clothing Identifier (Jupyter Notebook, Numpy, Pycharm, Python):* Program designed to be able to identify the difference between different forms of clothing when presented with picture. Allows a computer to identify certain types of clothing which is valuable in identifying possible felons or automating pricing.

- Utilized Keras and Tensorflow API.

# Ansh Sawant

📍 Raleigh, North Carolina, United States ✉ anshsawant@live.com ☎ (919) 780-2715 🔗 in/ansh-sawant-5b0326177/

---

## SUMMARY

Software developer currently pursuing a bachelors degree in computer science, with experience in working as a team to deliver appropriate technology solutions for clients within deadlines. I am able to grasp new concepts quickly and efficiently, and am seeking an internship position in an environment where I can broaden my skills and assist in the completion of real company projects.

---

## EXPERIENCE

### Software Development Intern

Bitlogix Technologies

September 2018 - January 2019, Raleigh, NC

- Wrote, updated, and maintained computer programs and software packages using Java, JavaScript and the Node.js runtime environment.

---

## EDUCATION

### Bachelor of Science In Computer Science

Minor in Mathematics • University of North Carolina in Charlotte • Charlotte, NC • Expected Graduation in 2022 • 3.7 GPA

---

## INVOLVEMENT

### Safety Officer

University of North Carolina at Charlotte • UNC Charlotte Club Soccer • August 2019 - Present

- Passing training and safety requirement courses
- Ensuring that conditions are safe for play during practice and games.
- Helping source medical equipment required for matches.

---

## PROJECTS

### Camp Counselor

The Blake School • June 2018

- Helped with day to day functions of the camp.
- Prepared materials for class activities.

---

## SKILLS

Java

JavaScript

Data Entry

Adobe Suite

# Sarah Shealy

E-mail: sshealy2@uncc.edu

Student ID: 801217845

Telephone: +1 704 526 9951

LinkedIn: [www.linkedin.com/in/sarah-shealy-b62856195/](https://www.linkedin.com/in/sarah-shealy-b62856195/)

---

## Education

**University of North Carolina at Charlotte**, January - December 2021

*Master's of Science* in Computer Science

**University of North Carolina at Chapel Hill**, August 2016 - May 2020

*Bachelor of Arts* in Applied Linguistics, Chinese minor, Chemistry minor; GPA: 3.53

**National Taiwan University**, Taipei, Taiwan, February - May 2019

International Chinese Language Program

---

## Skills

Programming languages and technologies:

- |                  |                   |
|------------------|-------------------|
| - HTML           | - Java            |
| - CSS frameworks | - Python          |
| - JavaScript     | - MySQL           |
| - Node.js        | - React.js        |
| - jQuery         | - API interaction |

Languages: 8 years study of Mandarin Chinese 「汉语」

---

## Projects

### [Explore Copenhagen](#)

- React app that allows client to discover information about Copenhagen
- Technology: React.js, Axios, Express, Mapbox
- GitHub [repository](#)

### [Brewery Map](#)

- JS app that allows client search a zip code & view a map of local breweries
- Technology: Javascript, CSS, jQuery, Ajax
- GitHub [repository](#)

---

## Experience

**Legal Operations Intern**, (June - August 2019), Akoustis Inc., Cornelius, NC

- Developed a web-based repository for marketing materials and legal documents
- Summarized key terms in contracts for contract database

**Legal Assistant**, (February - May 2019), Legal Aid Foundation, Taipei, Taiwan

- Assisted with English translation and literature search
- Presentation on development of legal technology

**Undergraduate Researcher**, (August 2017 - November 2018), UNC Eshelman School of Pharmacy, Chapel Hill, NC

- Conducted experiments and analyzed results
- Literature search and compilation

# Vernard Roy Ulrich III

[LinkedIn](#) • (704) 762-0453 • [vernard.ulrich.3@gmail.com](mailto:vernard.ulrich.3@gmail.com)

**PROFESSIONAL SUMMARY:** Certified IT Professional possessing a **Bachelor of Science degree in Computer Information Systems** and years of experience as a corporate **DBA** and **System Administrator**. A **veteran** with twelve years of technical skills as an Electronics and Avionics Mechanic in the North Carolina Army National Guard.

## SKILLS:

- Systems Administration
- SQL Server Administration
- Auditing & data collection
- Project management
- Cloud Administration
- Programming (including Powershell & Python)
- Installation and configuration/maintenance
- IT Security & Policies
- Incident Response
- Leadership and Coordination
- Problem Solving
- Communication

## EDUCATION:

|                                  |  |
|----------------------------------|--|
| University of NC at Charlotte    | Master's Degree in Computer Science (June 2021)                |
| East Carolina University         | Master's Certificate in Cybersecurity (Nov 2020)               |
| Pfeiffer University              | Bachelor of Science in Computer Information Systems (May 2014) |
| Rowan Cabarrus Community College | Associate in Science, Associate in Arts (May 2012)             |

## PROFESSIONAL EXPERIENCE:

**Asset Management Technologies, Inc. - Cornelius, NC**  
**Systems Administrator Aug 2017 – Jan 2020**

### Responsibilities:

- Accountable for technical backend hardware and software operations for small to moderate tech company. Maintained service for Lease and equipment rental management website.
- Knowledge of Intrusion Detection Systems (IDS), Security Information and Event Management (SIEM), Logging and Monitoring Application Development and Deployment, Continuous Integration and Development (CI/CD), SOC Internal Audit Compliance, User Access management with Office365 with Azure AD, Sharepoint, SQL Server Database Administration, network administration for On Prem and Cloud

### Results:

- Implemented new monitoring services, installed agents, set controls and alerts
- Oversaw migration and management of multiple environments to Azure IaaS.
- Administered SQL Server 2014, improved overall performance of jobs and stored procedures from hours to minutes.
- Implemented new methods of QA environment management, reduced downtime from weeks to less than 24 hours.
- Primary on-call support, ensuring 99.99% application up-time, reduced average response time from upwards of 20 seconds to .3 seconds

**Lowe's Companies, Inc. Engineering Department: Aug 2014 – Aug 2017**  
**Infrastructure Engineer I – SQL Server DBA**

### Responsibilities:

- Database Administration to include use of SSRS, SSIS, T-SQL, SQL Server Management Studio (SSMS), Visual Studio/Business Intelligence, Failover Clustering, AlwaysOn High Availability groups, data warehouse management.
- Supporting Windows Servers to include SQL Server diagnostic software such as Idera, SolarWinds and Sentry; Backup Management systems for Disaster Recover and Business continuation with Simpana CommVault and Avamar; BMC Remedy and Portal, and SCCM for incident and work order management

### Results:

- Served long periods of overnight support, reduced calls to primary on-call from avg. 5/wk to 0, troubleshoot issues and reduced email alerts from 50 nightly to 5.
- Lowe's Top Contributor Stock Award 2016
- Managed up to 5 projects at a time from design to completion.
- Implemented new automated metrics report and inventory management process
- Attended MS certified training courses: Administering SQL Server 2014, Implementing a Data Warehouse with Microsoft SQL Server 2014,



**Pfeiffer University IT Department: Misenheimer, NC**  
***IT Analyst May 2013 – June 2014***

**Responsibilities:**

- Maintain diverse array of electronic equipment throughout campus
- Manage faculty, staff and student account data, software, hardware, and any technical issues
- Experience with Windows OS, Servers, MS Office Pro 2010 and 2013, Exchange, and multiple ticket and incident management systems

**Results:**

- Resolved issues with IP and security camera.
- Created a system of evaluation for technical, hardware and software issues
- Raised money for Computer Society by implementing a volunteer team of technology students to fix other student technical problems for donations

**NC Army National Guard: Morrisville, NC**  
***AH-64D Armament, Electronics, Avionics Maintenance Mar 2004 – Mar 2016***

**Responsibilities:**

- Isolating faults, diagnosing, troubleshooting and repairing malfunctions to components following technical manuals, directives and safety procedures
- Maintaining records of systems, weapons, deficiencies and activities for all 24 aircraft
- Tracked hourly and calendar-based inspection and phases

**Results:**

- Returned 24 aircraft from Iraq in fully mission capable condition and continued to help maintain aircraft for future deployments
- Completed numerous 500-hour phase inspection to help company's deployment end successfully
- Set up database to allow changes to be made quickly and efficiently to documentation