# William (Noël) Barron Software Developer





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in LinkedIn



Portfolio



**GitHub** 

# **PROFESSIONAL SUMMARY**

As a recent Computer Science graduate with a strong foundation in full-stack software development, Al engineering, and machine learning, I am skilled in developing both front-end interfaces and back-end system architectures. Certified by Microsoft in AI fundamentals, I have hands-on experience in developing and deploying ML models and pipelines on Azure. My passion lies in leveraging emerging technologies to create innovative solutions that address real-world challenges.

#### **EDUCATION**

# NORTHWESTERN UNIVERSITY, Evanston, IL

Bachelor of Sciences, Computer Science, June 2024

Emphasis on Al Programming, Natural Language Processing, and Software Development

Honors: Dean's List, High Honors (Fall 2017)

Clubs: Residence Hall Association, President (Sept 2018 - Dec 2018), Treasurer (Mar 2018 - Sept 2018)

# **PROFESSIONAL EXPERIENCE**

#### NORTHWESTERN UNIVERSITY, Evanston, IL

Peer Mentor, September 2018 - June 2019

- Led instruction for 10 students per quarter in programming fundamentals using Racket and C++
- Organized and conducted weekly supplementary lectures and office hours to support student learning
- Guided students in utilizing the VS Code debugger to enhance efficiency in identifying bugs within C++ programs

#### **CREDENTIALS**

- Azure Al Fundamentals (Al-900) (942/1000) Microsoft, July 2024
- Build a natural language processing solution with Azure AI Language Microsoft, July 2024
- Create an intelligent document processing solution with Azure AI Document Intelligence Microsoft, July 2024

# **TECHNICAL PROFICIENCIES & METHODOLOGIES**

- AI Technologies: PyTorch, Scikit-Learn, Keras, Transformers, NLTK, CUDA, Azure AI Services (including Azure Machine Learning Studio, Azure Language Studio, SDKs, CLI)
- NLP Solutions: Sentiment Analysis, Named Entity Recognition, Text Analysis, Q&A Services, Custom Text Classification, Language Translation, Speech-Enabled Apps
- \* Technologies: Spring Boot, Apache Maven, Ruby On Rails, ReactJS, Node.js, Docker, Postman, MySQL, JupyterLab, Android Studio, VMware, ChatGPT
- Data Analysis & Visualization: Power BI, Pandas, NumPy, SciPy
- Version Control & Development Tools: Git/GitHub/GitPod, VSCode, Vim, Inno Setup
- ♦ Languages: Python, C, C#, C++, Java, Ruby, Perl, T-SQL, XML, HTML5, CSS, JavaScript, Common Lisp, Racket
- Skills: Proficient with data structures and algorithms, clean and scalable coding practices, concise documentation
- Methodologies: Agile (Scrum), Waterfall
- Personal Attributes: Quick and self-motivated learner, strong teamwork, communication, empathy, passion, and innovation

### **PROJECTS**

# YOUTUBE SENTIMENT ANALYSIS, NLP with PyTorch (Creator, 2024, GitHub)

Personally trained AI model that pulls comments from YouTube videos and determines general sentiment Key implementations: PyTorch, Scikit-Learn, NLTK, Transformers, CUDA, Pandas, JupyterLab, Docker, model training

MASTER THE GODS FOR ANDROID, Java and XML Android App Design (*Creator, 2024, <u>GitHub</u>*) Enhances the gaming experience for Hollow Knight players by tracking their abilities in the Godmaster DLC Key implementations: Object-oriented programming, Android Studio, UI/UX design, data structures, data persistence

**AI RECIPES,** Knowledge Representation and Reasoning AI *(Creator, 2023, <u>GitHub)</u>)*Al ontology tailored for recommending ingredient substitutions based on food preferences and allergens Key implementations: Knowledge base, forward/backward chaining

For a more detailed look at all of my projects including demos, please visit my website.