Nonso Duaka

**(318)-232-2055 ● nonsoduakagmail821.com ● linkedin.com/duaka-nonso-566a4727a**

# EDUCATION

**Grambling State University** | Double Major in Mathematics & Physics and Computer Science Major with Concentration in Biomedical Sciences **Expected Mar 2027**

* **GPA***:* 4.0/4.0
* **Organizations***:* Louisiana Alliance for Minority Participation LAMP (LS-LAMP), Centre of Mathematical Achievement in Science and Technology (CMAST), E.L. Cole Honors College, NSBE (National Society of Black Engineers).
* **Relevant Coursework***:* General Chemistry, Python Programming, Principles of Biology, General Physics, Data Structures and Algorithms, Organic Chemistry, Differential & Integral Calculus, Anatomy and Physiology.

# EXPERIENCE

**Grambling’s Department of Math & Physics (NASA-Funded Research Project) Aug 2023 - Present**

Research Assistant | Dr. Haeyeon Yang’s Lab | Grambling, LA

* Engineered nanoparticles via laser ablation methodologies in liquid matrices, optimizing particle characteristics for targeted applications.
* Participated in the grinding and melting of Titanium-SmColbalt, a critical step supporting NASA's innovative lunar habitat initiatives.
* Analyzed data collected from UV-visual and X-ray Diffractometer instruments to support material characterization.
* Investigated the prospective utility of quantum dots in in-vivo imaging modalities, underscoring their potential for transformative medical diagnostics.

**Grambling’s Department of Biological Sciences (Eco pharmacovigilance Lab) Aug 2023 - Present**

Research Assistant | Dr. Hector Douglas’ Lab | Grambling, LA

* Developed experimental protocols and setups to investigate the environmental impact of minute quantities of Orlistat on Daphnia magna.
* Collaborated daily with a dedicated team, ensuring consistent monitoring, water changes, and feeding routines for Daphnia Magna
* Conducted detailed data analysis, interpreting results to discern the effects of Orlistat exposure on Daphnia magna populations.

**Louisiana Alliance for Minority Participation LAMP (LS-LAMP) Aug 2023 - Present**

Program-member | Toxicology Lab | Grambling, LA

* Engaged in specialized labs dedicated to the precision splitting and harvesting of mouse liver cells, focusing on studying cancer gene proteins.
* Participated in an enlightening field trip to an EPA Superfund site in Winfield, deepening insights into the environmental consequences of Dr. Dorsey's Pentachlorophenol research.
* Developed proficiency in Polyacrylamide Gel Electrophoresis and Blotting techniques, augmenting skills essential for advanced molecular research on cancer gene proteins.

**Centre of Mathematical Achievement in Science and Technology**

Volunteer | STEMNOLA | Grambling, LA **Aug 2023 - Present**

* Actively volunteered with CMAST for STEM NOLA/STEM Grambling initiatives, fostering high school students' curiosity and engagement in STEM disciplines.
* Designed and constructed models and mini-projects, leveraging scientific principles to elucidate complex concepts for high school participants.
* Developed innovative strategies to demystify scientific terminology, ensuring clear and accessible explanations tailored to the

individual needs of assigned students.

**Paragon One**

Extern | PwC x Notable Narratives | Remote **Aug 2023 - Sep 2023**

* Analyzed and evaluated Notable Narratives' potential funding sources, incorporating insights and trends to diversify its revenue streams without charging students.
* Presented findings to senior leadership identifying a few key donor profiles whose interests and philanthropic tendencies align with the needs of Notable Narrative.
* Created and delivered a presentation on recommended findings to Notable Narratives and PwC employees, using interactive visual dashboards and data-informed storytelling.
* Earned a certificate of Outstanding Completion for exceeding the externship requirement.

**Faith Alive Foundations and Hospitals**

Electronic Medical Record Assistant | Scribbing Department | Jos, NIG **May2022 - Dec2022**

* Managed patients' records, overseeing appointment schedules and facilitating reschedules.
* Conducted daily General Out-Patient (GOP) check-ins and check-outs.
* Assisted in medical scribing, electronically documenting patients' diagnoses and treatments during consultations.

# PROJECTS

* **DaphniaLipaseExpressionSim** (**Python**): Simulates the condition of Daphnia Magna depending on the lipid-richness of the food available

# SKILLS

# Polyacrylamide Gel Electrophoresis (PAGE)| Python (Programming Language)| Python Matplotlib| R-programming language | Ultraviolet-Visible UV/VIS Spectrophotometers| Wet Lab TechniquesWriting| Coordination | Time management | Service orientation| Problem-solving | Critical thinking | Collaboration | Flexibility| Leadership| Public Speaking.