Aaditya M. Kanase

Charlotte, North Carolina | (984) 837-7176 | aadkan2007@gmail.com

EDUCATION

University of North Carolina at Charlotte, Charlotte, NC **Present**
Junior Class Standing

- *Bachelor of Science in Electrical Engineering, Power and Energy Systems Concentration*
- *Bachelor of Science in Computer Engineering*

CGPA: 4.000/4.000

Wake Technical Community College, Raleigh, NC **July 2025**
Associate in Engineering, Dual Enrollment
CGPA: 4.000/4.000

Willow Spring High School, Fuquay-Varina, NC **June 2025**
Graduated *Summa Cum Laude*, Class *Valedictorian*
GPA: 4.783/5.000

TECHNICAL SKILLS

Data Analysis

- ImageJ, SciKit, NumPy

Skilled Programmer *(MATLAB, C++, Python)*

- Designed several programs for personal and institutional use

Design & Modeling Software

- AutoCAD, SolidWorks, COMSOL

Proficient in AI/ML Training and Adaption

- Tensorflow, PyTorch, TinyML, Deep Learning Modeling

Electronic Design and Analysis

- Power distribution, logic circuit design, circuit analysis, photonics; electro-optics

EXPERIENCE

William States Lee College of Engineering **November 2025 - Present**
Mentored Independent Researcher

- Tested viability of ML-Algorithms to filter and interpret raw EEG Data
- Creating a terrain-aware, steep-incline path-finding algorithm
  - Designing a crawler robot and testing its feasibility in civil infrastructure deficiency detection against flight-enabled alternatives
- Active Contributor to Charlotte AI Research's Neural Encoding project
  - Work on algorithm math optimization for future usage in neural embedding

Microvascular Engineering and Regeneration Lab **November 2025 - Present**
Undergraduate Research Assistant

- Supporting development of microfluidic chip models that mimic microvascular systems for next-gen skin graft research.
- Conducting research on iPSCs to generate extracellular matrices for endothelial tissue

RELEVANT COURSEWORK

Engineering: Network Theory; Computer Programming; Logic Systems Design; Engineering Graphics
Mathematics: Linear Algebra; Probability and Statistics; Multivariable Calculus; Discrete Structures; Differential Equations
Sciences: General Chemistry II; Calculus-Physics II; Human Anatomy and Physiology; General Chemistry II

www.linkedin.com/in/aaditya-kanase/ | github.com/aadityakanase | aadityakanase.github.io