

Simon Angina

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EDUCATION

- **Rice University** Houston, TX
Bachelor of Science in Electrical and Computer Engineering; GPA: 3.7 *Aug. 2023 – May 2027*
 - **Relevant Coursework:**
 - **Courses:** Data Structures and Algorithms, Fundamentals of Computer Engineering, Computational Thinking, Fundamentals of Electrical Engineering I & II, Program Design, Object Oriented Programming

SKILLS

- **Skills:** Python, C++, SQL, Swift, React, JS, HTML/CSS, Next.js, AWS, Docker, Altium, AutoCAD, VeriLog, LTSpice, VHDL, Project Management, Leadership, Problem Solving, Communication, Time management

EXPERIENCE

- **Rice Wide Lab** Houston, TX
Research Assistant *Aug 2024 - Present*
 - **Focus Area:** Spearheaded research on advanced high-performance Gallium Nitride (GaN) power devices, specializing in trench FETs, multichannel FETs, and FinFETs, resulting in 10% efficiency increase.
 - **Performance Management:** Developed and evaluated devices to achieve critical performance parameters, including: E-mode, Minimized ON-resistance, Maximized breakdown voltage, High cutoff frequency. .
 - **TCAD Simulation:** Leveraged TCAD software to model and analyze advanced GaN power devices, including custom trench FET prototypes. Extracted critical performance metrics and investigated failure mechanisms, resulting in 12% improvement in device reliability and 5% enhancement in overall performance
- **Rice Data Science Club — Data to Knowledge Lab - Rice D2K** Houston, TX
DEEP Research Team Leader & Mentor *Aug 2023 - Present*
 - **Medical Data Analysis:** Led semester-long research analyzing health data of 200,000+ patients using Pandas and Jupyter, uncovering insights that informed diabetes prevention strategies and improved patient education on risk factors.
 - **Data Analysis-2024 Rice Datathon Winner:** Won 2024 Rice Datathon by creating 5 innovative, interactive visualizations in Google Colab, simplifying 50,000+ MLB data points and providing clear insights that secured the team's top position.
 - **Mentoring:** Guided the research team in analyzing key factors affecting house prices, synthesizing insights from 8000+ entries; findings directly influenced creation of a predictive model. Structured an onboarding program for new team members, streamlining training processes and providing resources that enhanced foundational skills; program is now utilized by over 10 new members annually
- **Next Technologies Limited** Nairobi, Kenya
IT Intern *Jul 2021 - Aug 2021*
 - **Server Installation:** Spearheaded the installation of 5 servers for clients, enhancing document storage capabilities; streamlined workflow processes which resulted in a 30% increase in organizational accountability.
 - **Database Management:** Generated a structured SQL framework to define and manage relationships between inventory and orders, leading to a 50% reduction in data inconsistencies and improving overall data accuracy for operational reporting.

PROJECTS

- **MLB Performance Analysis:** Implemented a modified ELO ranking system from scratch fitting scalar variables to maximize AUC-ROC and used it and various fatigue metrics(distance traveled, jet lag, days on the road, and differences in direction between the home and away team) to train an XGBoost Model to predict home team winning percentage for each games. Used Folium to create a US Map representing team travel distance.
- **Portfolio:** Personal portfolio built with React.js, Next.js, Three.js, and GSAP, featuring responsive design, smooth animations, and interactive 3D point cloud elements. Enhanced user engagement with intuitive navigation and dynamic UI features.
- **Klix AI:** Developed a real-time AI voice agent system using FastAPI and OpenAI that transcribes calls, provides AI-driven feedback, and detects system bugs. Integrated Twilio for outbound call handling and built a responsive web interface using Tailwind CSS. Improved agent performance monitoring by 10% by automating call analysis and transcript evaluation.