Katrina Rachel Panlilio Viray

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Education

University of Houston — Houston, TX
Bachelor of Science in Computer Engineering, Minor in Mathematics - GPA: 3.8/4.0 — *May 2025*

Experience

Microsoft — Redmond, WA
Software Engineer - Availability Platform Team — *August 2025 - Present*

- **Technologies:** C#, Moq, PowerShell, KQL, Azure, JSON
- Software Engineer building tools to improve Azure's reliability for 700M+ customers

Snap Inc. — Santa Monica, CA
Software Engineer Intern - Ad Data Infra Team — *May 2025 - August 2025*

- **Technologies:** Java, SQL, Google Cloud Platform
- Created a Java Dataflow to convert Bigtable ad logs into BigQuery tables for low-latency access by 50+ engineers
- Built a Looker dashboard with custom SQL queries for ad insights, saving engineers 3+ hours per query
- Integrated BigQuery with an internal AI chatbot that converts natural language into SQL for instant ad insights

Microsoft — Redmond, WA
Software Engineer Intern - Availability Platform Team — *May 2024 - August 2024*

- **Technologies:** C#, Moq, PowerShell, KQL, Azure, JSON
- Established the first real time connection for Azure's repair and root cause analysis services for 200K+ customers
- Reduced VM downtime by 10+ minutes by using real-time root cause data of VM failures to fast track repairs in C#
- Improved root cause clarity for VM failures by querying fault info with KQL, updating 30% of Kusto's records
- Built an optimized decision tree for root causes, accelerating VM failure diagnosis by 50% for stop and destroy tasks

NASA — Houston, TX
Software Engineer Intern - Avionics Systems Team — *January 2023 - May 2023*

- **Technologies:** Python, Embedded C
- Created a Python GUI for a pick-and-place machine, boosting data entry efficiency by 70% by generating databases
- Developed a PID microcontroller with C programming for stable and efficient temperature regulation in radiators

Projects

Maze Navigating Robot | *Embedded C*

- Built a maze-navigating robot, integrating embedded systems, and placed 4th out of 24 robots in a timed race
- Developed ADC and UART communication systems for real-time data processing of PID metrics with Bluetooth
- Integrated distance sensors and PWM motor control for precise line detection and navigation in dynamic mazes

Neural Kinetic Sculpture | *Python, React Native, Tailwind CSS*

- Created an interactive EEG-driven sculpture for an audience of 1,000+, blending technology and art in dance shows
- Processed real-time EEG data with Python to isolate alpha waves, enabling dynamic artistic imagery from dancers
- Created a React Native mobile app to map the signals to movement, sound, or light, and configure EEG parameters

Leadership

Career Fair Committee Chair — Houston, TX
Society of Women Engineers — *December 2021 - May 2023*

- Led a team of 15+ to plan professional development events, connecting over 140+ companies with 2000+ students

Technical Skills

Languages: Python, C++, C#, C, Java, JavaScript, HTML, CSS, PowerShell, KQL, SQL, Assembly, MATLAB
Frameworks & Libraries: React.js, Express.js, Node.js, Tailwind CSS, JSON
Developer Tools: Git, GitHub, SVN, MongoDB, Azure, Postman, Vercel, Figma