Nickolas Regas

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Education

Washington University in St. Louis — St. Louis, MO

B.S. in Electrical Engineering & Computer Science, Minor in Finance — *Aug. 2025 – May 2029*

- GPA: 4.00/4.00
- Relevant Coursework: Data Structures & Algorithms, Differential Equations & Dynamical Systems Modeling, Calculus I/II/III, Physics Mechanics & Electricity and Magnetism, Computer-Aided Design
- One of 10 first-year students selected for the McKelvey Engineering/Computer Science Fellowship

Experience

IT Specialist & Consultant — November 2024 – Present

Patel Law Offices — *Clark, NJ*

- Manage and maintain 10+ WordPress websites on IONOS hosting, ensuring optimal performance, security, and runtime
- Develop 20+ Zapier automation workflows linking Gmail, Mailchimp, Google Contacts, and LexHelper, improving efficiency by 40%
- Refurbished and redeployed 5 outdated computers and servers, saving over $1,000 in hardware costs
- Enable 5+ legacy and x86-only applications on ARM-based laptops by implementing and optimizing emulation solutions, expanding software compatibility

Research Scholar — Summer 2024

The Governor's School of New Jersey Program in Engineering & Technology — *New Brunswick, NJ*

- Developed and tested advanced pathfinding algorithms (A* & RRT*) for unmanned aerial vehicles in collaboration with Lockheed Martin, identifying the most efficient navigation strategies
- Selected to present at MIT's Undergraduate Research Technology Conference and publish paper in IEEE Proceedings
- Competitively selected as one of 60 scholars from NJ for a rigorous, monthlong engineering & technology program
- Mastered challenging coursework in Theoretical Physics, Robotics, Microcontroller Programming (C++), and game design with Unity

Code Coach — June 2025 - August 2025

The Coder School — *Berkeley Heights, NJ*

- Taught programming and game logic to 12 Elementary school students with Minecraft Education
- Led robotics sessions where students built and programmed robots using block-based Python coding
- Empowered students to understand fundamental computing concepts through dynamic, engaging lessons

Projects

Stock Market Prediction Using AI-Based Analysis of News Headlines | *Python, PyTorch, pandas, XGBoost*

- Built and trained a neural network in Python using PyTorch to predict stock market movements from news headlines
- Achieved 60% prediction accuracy, demonstrating the potential of NLP-driven financial forecasting
- Applied Tokenization and text preprocessing to transform raw headlines into structured model inputs

Analysis of A* and RRT* Pathfinding Algorithms for Drone Navigation | *Python, PyGame, DJI Tello API*

- Spearheaded research which analyzed A* vs. RRT* for drone navigation, finding A* 3-5x faster, while RRT* offered superior flight efficiency and accuracy
- Conducted real-world drone trials with DJI Tello EDU, visualizing performance with Pygame across four diverse maze types
- Translated virtual pathfinding to physical drone control, advancing autonomous UAV navigation and cost-effective drone deployment

Technical Skills

Languages: Python, Java, C++, MATLAB
Frameworks: WordPress, Zapier, Unity, Microsoft Office
Developer Tools: Git, Linux, GitHub Pages, VS Code, Jupyter Notebooks
Libraries: Sci-Kit Learn, XGBoost, PyTorch, pandas, NumPy, Matplotlib