ELVINA WIBISONO

New York, NY 10023
617-959-0278 ew2709@barnard.edu linkedin.com/in/elvina-wibisono
github.com/elvinawibisono elvinawibisono.github.io

EDUCATION

Barnard College, Columbia University **New York, NY**

Bachelor of Arts in Computer Science and Cognitive Science *Expected Spring 2024*

- **Relevant Coursework:** Data Structures, Advanced Programming, Artificial Intelligence, Discrete Mathematics, Fundamentals of Computer Systems, Computer Science Theory, Computer Vision, Introduction to Databases, Developing Accessible UI Design, Computational Sound

TECHNICAL SKILLS

Languages: Java, Python (Numpy, Matplotlib), C/C++, R, SQL (PostgreSQL, MySQL), JavaScript (jQuery), HTML/CSS, MatLab, SPSS, MIPS
Technologies/Frameworks: Unix/Linux, Git/Github, Neo4j, Embedded Systems (Raspberry Pis & Arduino), Docker, Flask, Node.js

WORK & RESEARCH EXPERIENCE

Barnard Accessible and Accelerated Robotics Lab | *a2r-lab.org* **New York, NY**

Research Assistant – Computer Vision in Tiny Robots | Prof. Brian Plancher *October 2022 – Present*

- Optimize ground-level SVO (Semi-Direct Visual Odometry) mapping using **C++** for broader research applications
- Spearhead *Petoi Bittle Robot Dog* hardware integration, ensuring seamless functionality for cutting-edge research
- Lead a dynamic research team, driving 15% productivity growth through weekly cross-functional collaboration
- Formulate a focused research strategy by analyzing and synthesizing insights from 20+ relevant pieces of literature

Research Intern – Barnard Summer Research Institute *May 2023 – August 2023*

- Secured a prestigious $6,000 grant from Barnard Summer Research Institute for pioneering Computer Vision research in cost-effective embedded systems and Tiny Robots
- Conducted rigorous testing of Computer Vision algorithms on our hardware, resulting in efficient resource utilization
- Delivered intricate research findings at Lida Orzeck '68 Poster Session, effectively engaging a diverse audience

Barnard Soros Lab for Artificial Life **New York, NY**

Research Assistant – Soft Robots | Dr. Lisa Soros *March 2023 – May 2023*

- Produced concise documentation of codebase structure and functionality, reducing code comprehension time by 35%
- Investigated and evaluated evolutionary algorithms, identifying optimal components for the research project
- Contributed to the development of creative strategies for integrating evolutionary algorithms into the project

CAST Software **New York, NY**

Data Analyst Intern *June 2022 – August 2022*

- Identified and improved code areas, enabling data retrieval from **Neo4j** with specific node properties
- Developed a **Java** extension that streamlined data import/export, boosting data processing efficiency by 40%
- Designed and executed robust code to organize data with specific properties into CSV files, improving data accessibility and organization

PROJECTS

Accessible Weather Website | *github.com/elvinawibisono/Accessibility-WeatherWebsite* **May 2023**

- Developed a weather-based outfit recommendation site using **Python, Flask, HTML/CSS,** and **jQuery**
- Worked on improving the website's design for clarity and content-rich presentation, ensuring a user-friendly experience
- Designed the website prioritizing inclusive design with text-to-speech, clear text, and user-friendly features to enhance usability for all visitors

OWA Shopping Website | *github.com/elvinawibisono/w4111-proj1* **November 2022**

- Created a web-based e-commerce platform using **Python, Flask, HTML, CSS,** and **PostgreSQL**
- Designed and implemented user-friendly features, including shopping carts, product pages, and category sorting
- Managed **PostgreSQL** database, including user account information, product details, and orders