LUKE TONG

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EDUCATION

University of Pennsylvania   Philadelphia, PA
Bachelor of Science in Computer Science, Minors in Math, Philosophy   *Aug. 2023 – May 2027*
GPA: 3.92, Major GPA: 4.00

- NETS 2120: Scalable and Cloud Computing
- STAT 4300: Probability
- MATH 1410: Multivariate Calculus

EXPERIENCE

Incoming SWE Intern   June 2024 – Present
TelVue Corporation   *Mount Laurel Township, NJ*

Project Lead at Penn Spark   September 2023 – Present
University of Pennsylvania   *Philadelphia PA*

- Create semesterly passion and/or client computer science projects
- Led a team of 9 developers to create a social events bulletin for Penn students
- Develop full-stack applications using React, AWS Lambda, PyTorch, and Docker

Developer at Penn Labs   February 2024 – Present
University of Pennsylvania   *Philadelphia PA*

- Create and maintain web/mobile products used by over 100,000 unique Penn students
- Develop full-stack web applications using Django, Next.js, PostgreSQL, and AWS CDK
- Migrated course alert functionality from Penn Course Alert to Penn Course Plan for more intuitive UX
- Collaborating with Penn admin on how to best implement comments into Penn Course Review while maintaining confidentiality, preventing spam, and establishing unbiased moderation

Undergraduate Teaching Assistant (Discrete Mathematics)   August 2024 – Present
University of Pennsylvania   *Philadelphia PA*

- Hold weekly office-hours
- Teach recitation and go over lecture content
- Participate in weekly grading sessions

Infy Tech Pioneer   December 2023 – January 2024
Infosys Foundation USA   *Charlotte, NC*

- Immersion in GenAI, Prompt Engineering, and AI/ML in Python
- Creating a PDF summarizer using Jupyter Notebook and OpenAI in Python

PROJECTS

Sparkify | *Python, Svelte, Lambda, Docker, Git*   September 2023 – December 2023

- Developed a full-stack web application using a SvelteKit frontend and Python backend
- Implemented Spotify OAuth to get user's top songs/albums
- Visualize user music tastes into an aesthetic collage of album covers and photos using PyTorch and Pillow

The Tower newspaper website | *Next.js, UI/UX, PostgreSQL, Prisma*   May 2018 – May 2020

- Migrated primary website from a Wordpress site to a freely hosted Next.js application
- Utilized server side routing to connect PostgreSQL database

Asciiframe | *Rust, OpenCV*   January 2022 – May 2020

- Used Open Computer Vision to convert videos to streams of ascii characters that can be watched in the terminal

TECHNICAL SKILLS

Languages: Java, Python, C, C++, SQL, JavaScript/TypeScript, Rust, Go, HTML/CSS, Ruby
Frameworks: React, Node.js, Django, Next.js, Rails
Developer Tools: Git, Docker, AWS CDK, Linux
Libraries: PyTorch, OpenAI, Pillow, numpy, Matplotlib