# SHUBH PATNI

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## **EDUCATION**

# Northeastern University

Sep 2021 - May 2025

Bachelor's Computer Science and Economics

Relevant Courses: Data Structure & Algorithms, Object Oriented Design, Database Design, Networks & Distributed Systems

Certifications: Stanford: Algorithm Specialization, Coursera: Nand 2 Tetris

# PROFESSIONAL EXPERIENCE

Giaaka Freelance Remote

Full Stack Developer

Sep 2023 - Oct 2023

- Spearheaded the creation of Norswap and led a team of 3 engineers to build a staking service in Next JS, MongoDB
- Proficiently designed and implemented the Frontend, Backend, API endpoints, and seamlessly integrated Smart Contracts within Norswap. Hosted the service on AWS using Nginx

Northeastern University

Part-Time Boston, MA

Sep 2022 - Dec 2022

Teaching Assistant

- Exceptional teaching assistant at Northeastern University, specializing in Discrete Structures in Computer Science.
- Received consistent positive feedback from students for my ability to simplify challenging topics, resulting in increased student understanding and improved exam scores.

Phemex Part-Time Remote

Researcher Jan 2022 - Jun 2022

- Crafted a comprehensive research paper delving into the intricacies of Avalanche network's tokenomics, fundamental
  aspects, and ecosystem, providing invaluable insights for informed investment decisions by Phemex exchange
  stakeholders.
- Conducted an in-depth assessment of the Song a Day DAO, evaluating the worth of its music NFT collection.

# PROJECTS & OUTSIDE EXPERIENCE

## **Image Processing Software**

- Implemented ModelViewController and Command Design patterns to optimize a Javabased image processing software
- Developed interactive Java Swing user interfaces and optimized algorithms for mosaic, histogram, and color transformations, enhancing user experience.

#### Marble Solitaire

- Implemented object oriented design principles and utilised the builder pattern to develop a modular and maintainable marble solitaire game in Java.
- Demonstrated proficiency in object oriented design principles and creating optimised algorithms in Java.

#### Face ID for Mac

- · Created open source software enabling users to unlock devices effortlessly, eliminating the need to enter passwords
- Spearheaded the development of a cuttingedge solution, harnessing Python, Selenium, Linux daemons, and Open CV to seamlessly unlock devices, emulating the conveniences of an iPhone

# ResMe

- Engineered a resume builder platform leveraging Next.js and TypeScript, integrating Zod, MongoDB, Next Auth, coupled with Server Actions and REST APIs for backend operations, and Zustand for state management.
- Implemented a dynamic, real-time custom preview feature, enabling users to review updates instantaneously and download their resumes in PDF format. Achieved 95% on Lighthouse, Website currently serves over 1000 users

# **NEU Gym**

- · Developed a website for university, empowering 25000 students to discover the least crowded times for gym visits
- Leveraged D3.js to create interactive charts. Implemented cron jobs and computer vision OCR for automated data scraping, and PostgreSQL for robust data storage.

#### Pendulum

- · Handpicked among just 16 teams by Lightspeed and Polychain Capital to pitch to a discerning audience of 50 VCs
- Orchestrated end-to-end development for Pendulum, encompassing smart contracts, frontend design, and contract integration using Next JS, Typescript, Wagmi, and Solidity

#### **Actions**

- Secured victory in the prestigious Lion Hack for Cyber Connect track at Columbia University.
- Developed a semi-functional social media platform within a remarkable 24-hour timeframe.

# **SKILLS & INTERESTS**

Skills: Java, Next.js, Node.js, AWS, Django, GraphQL, JavaScript, Git, HTML/CSS, MongoDB, MySQL, Postgres, React.js, Redux, REST APIs, SQL, Python, TypeScript, Web Development, Software Testing, Arduino, R, Elastic Search

Interests: Finance, Backpack traveling, Skateboarding, Calisthenics, Reading, Guitar, Twitter, Coding