

# SHUBH PATNI

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## EDUCATION

### Northeastern University

Aug 2021 - Apr 2025

Bachelor's Computer Science and Economics

**Relevant Courses:** Networks, Database Design, OOPs, Data Structures and Algorithms, Information Retrieval, AI

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

## PROFESSIONAL EXPERIENCE

### Resme

Founder

Feb 2024 - Present

- 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

### Hometap

Fulltime Remote

Full Stack Engineer (Co-Op)

Jul 2024 - Dec 2024

- Innovated textextract and OCR solution leveraging camunda, AWS, and implementing caching, slashing document processing time by 700%
- Engineered django scripts and migration files for seamless conversion of legacy user documents to new model
- Spearheaded development of new GraphQL and Django APIs, improving dashboard and form creation processes

### HFA Research

Part-Time Remote

Analyst

Feb 2024 - Jul 2024

- Developed an indepth research report on Bittensor, exploring its subnets and positioning it as a key player in the decentralized AI industry
- Engaged audiences through articulate and informative content, contributing to increased understanding and awareness within the crypto community

## PROJECTS & OUTSIDE EXPERIENCE

### Trading Backend

- Built a high-performance token launch platform backend in Rust, supporting on-chain/off-chain user reputation scoring via random weighted sampling of user activity.
- Optimized backend performance to reliably process over 10,000 webhook requests per second, achieving sub-100ms response times through multithreaded processing and efficient data pipelines.

### SMTP Server and PNG Encoder

Oct 2024 - Dec 2024

- Successfully created a custom SMTP server using Rust, showcasing strong grasp of programming concepts and SMTP protocol
- Designed and implemented a program for encoding and decoding information within PNG files, demonstrating advanced technical skills in data manipulation

### Face ID for Mac

- Created the first working Face ID solution for Mac by leveraging Python, Selenium, Linux daemons, and Open CV
- Allows users to unlock devices without entering their password just like an iPhone.

### Image Processing Software

- Used MVC and Command Design patterns to create an efficient Java-based image processing software.
- Designed interactive Java Swing user interfaces and crafted algorithms for mosaic, histogram, and color transformations.

### Marble Solitaire

- Executed object-oriented design principles and leveraged the builder pattern to craft a modular marble solitaire game in Java.

### 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, Rust, Next.js, Node.js, Django, Git, HTML/CSS, MongoDB, MySQL, Postgres, React.js, SQL, Python, TypeScript, R