JUSTIN PENG

+65 9060 2103 • justin.peng@u.nus.edu • linkedin.com/in/justin-peng • github.com/JustinPeng13 • justinpeng.com

EDUCATION

National University of Singapore

Aug 2021 - May 2025

Bachelor of Computing (Honours) in Computer Science

Grade Point Average: 4.84/5.0

TECHNICAL SKILLS

- Programming Languages: Java | Python | JavaScript | TypeScript
- Front-End: Next,js | React.js | TailwindCSS | HTML5 | CSS3 | Bootstrap 4 | jQuery
- Back-End: Spring Boot | Django | Flask | Node.js | AWS EC2 | AWS Lambda
- Database/Storage: PostgreSQL | MySQL | MongoDB | AWS DynamoDB | AWS Appsync | GraphQL | AWS S3
- Others: Git | Github Actions | Postman | Jenkins | Terraform | Vercel | Sourcetree | Mockito | Jest | Cypress | Docker | Charles Proxy

WORK EXPERIENCE

AUTODESK Software Development Engineer Intern [Product Data - Files & Derivatives]

Jan 2023 - Jun 2023

- Developed, tested, deployed, & maintained the Forge Content and Schema services (FCS & FSS) to store product data in the cloud
- Extended FCS API endpoints to allow querying by new attributes; created data tables & triggers to accommodate new content attributes; supported language localisation for logical mapping indexing and subsequent searching of content items
- Created AI Slack bot that recommends relevant threads upon detecting questions; achieved Special Mention in Autodesk Hackathon
- Tech Used: Java, Spring Boot, Mockito, Postman, Docker, Jenkins, Charles Proxy

INTERSEED.CO Front End Engineer (https://app.interseed.co/)

Mar 2022 - Dec 2022

- Cultivated a community of 182 members and 34 organisations interested in sustainability on a web application
- Implemented a mobile-responsive community map with search and 4 filter components, solving users' pain points
- Tech Used: React.js, TypeScript, MongoDB, Express.js, Node.js, Redux, GitHub Actions

SG CODE CAMPUS Course Instructor/Curriculum Developer

Apr 2021 - Jul 2022

- Coordinated and conducted the inaugural AWS–IMDA Data Science Bootcamp and Accelerator Programme for >200 secondary school students across Singapore to learn about, train, and compete with deep learning models
- Coached 27 adult participants to achieve SMU's Advanced Diploma in Python Programming and Applied Data Analytics certification
- Devised presentation materials and complementary projects for various programmes involving deep reinforcement learning, hyperparameter tuning, OOP, web development, Swift, and Python (partnered with AWS, IMDA, Apple, and Radin Mas Primary School)
- Conducted hyperparameter optimisation using grid search over soft-actor critic and proximal policy optimisation algorithms
- Compiled hackathon preparation guides for AWS DeepLens & DeepRacer involving AWS SageMaker, Lambda, and Rekognition

NESTED TECHNOLOGIES Lead Software Development Intern

Nov 2020 - Mar 2021

- Oversaw 3 full-stack web application projects deployed on AWS and a software development team of 10
- Implemented automation & machine learning software for client search, automated emailing systems, and floor plan analysis
- Designed front-end UI/UX and beautified the web applications with dark mode, modals, and animations
- Tech Used: Python, Django, HTML5, CSS3, JavaScript, Bootstrap 4, jQuery, AWS, Docker, Postman, PayPal SDK, GitHub Actions

PROJECTS

NUS FINTECH SOCIETY WEBSITE Tech Lead, Software Development (https://fintechsociety.comp.nus.edu.sq/)

Aug 2022 - Present

- Managed a team of 4 software engineers and 3 UI/UX designers to revamp the society website using Scrum methodology
- Tech Used: Next.js, TypeScript, ChakraUI, TailwindCSS, Figma, Vercel

RACESG Full Stack Engineer (https://race-sg.vercel.app/; devpost; presentation; repository)

May 2023

- Ideated & implemented an amazing race application incorporating sgID (Singapore government identity provider) to spur tourism
- Emerged as finalists in LifeHack 2023 organised by NUS Computing Club
- Tech Used: Next.js, TypeScript, Firebase, TailwindCSS, Figma, Vercel, sgID

THESOCIALPITSTOP Full Stack Engineer (https://thesocialpitstop.vercel.app/; report; poster; video)

May 2022 - Aug 2022

- Designed and built a serverless web application in 3 months with a fellow student to connect businesses and social enterprises for corporate social responsibility projects; awarded Orbital Apollo 11 (Advanced) certification
- Tech Used: Next.js, AWS, Terraform, GraphQL, Auth0, Algolia, Jest, Cypress, GitHub Actions, Vercel

EXTRA-CURRICULAR ACTIVITIES

NUS FINTECH SOCIETY Co-Director, Software Development

Jul 2023 - Present

 Led and managed a dynamic team of 40 technical leads, developers, UI/UX managers, and designers to implement innovative software solutions in the field of fintech

TEMBUSU STUDENT DEVELOPER CLUB Co-Director

Aug 2022 - Jul 2023

Handled the development of software applications to manage supper, laundry, and angel-mortal games within Tembusu College

COURSES & CERTIFICATIONS

- In Progress: AWS Certified Developer Associate
- Completed: DeepLearning.AI Deep Learning Specialisation | Orbital Apollo 11 (Advanced) | Stanford University Machine Learning | Smartcademy Data Analytics