Ted Yeates

Languages	Python, JavaScipt, Bash, TypeScript, Java, C#, C++
Frameworks	Django, React/Next.js, SvelteKit, FastAPI, Flask
Version Control	Git , Bitbucket , Github
Databases	PostgreSQL, MongoDB
Dev Tools	Nginx, Node.js, Express
Test Tools	Selenium, Cypress , Jest
Project Tools	Jira (Agile/Kanban), Scrum
CI/CD	Docker, Bamboo, Pipeline
Cloud	BT Internal, AWS, Vercel, Fly.io
Frontend	Tailwind, SASS, Shadcn, MUI, Bootstrap

Objectives
Passionate about designing, architecting and delivering secure and efficient applications. Eager to learn new technologies and share knowledge by mentoring others.

Interests
I enjoy rock climbing, Judo - brown belt, strategy computer and board games as well as learning the Thai language, culture, and cooking. I also enjoy pumpkin carving, physical security - lock picking and I am part of a Film club.

Work

Software Engineer 🔗 **BT Security** (BT)
Nov 2023 - Current (9m)

Web and cyber security tool development

- **Infrastructure Management:** Configured and deployed services using nginx, supervisord, and Gunicorn**.**
- **Microservice Architecture**: Designed and developed a high availability microservice architecture using FastAPI/React, Docker with JWT authentication and full design documentation. Designed system to support local legislation across Europe include multiple location based databases for storing confidential information.
- **Software Architecture:** Led the design and implementation of an EAV MongoDB-PostgreSQL hybrid solution to handle frequent custom field creation, optimize search functionality, data driven page creation and generic REST APIs for querying data across our system with Python and Django.
- **Mentorship & Team Leadership**: Mentored junior developers on learning opportunities, and task assignments aligned with strengths and personal goals. Advocated for modular development practices to accelerate delivery timelines and better development workflows.
- **Testing:** E2E tests using Selenium for testing important user journeys and pyTest for critical functionality testing
- **Micro-Frontend:** Developed front ends using React, Atlasskit and Shadcn built on top of our Django/FastApi REST APIs.

Cyber Software Developer 🔗 **Atheneum** 🌳
Feb 2023 - Jul 2023 (5m)

Cyber security tool development and security consultancy

- **Automated Penetration Testing**: Led security testing initiatives using ZAP for automated scans and OWASP methodologies. This included vulnerability identification, risk assessment (impact & probability), remediation suggestions, and secure coding documentation.
- **Shift-Left Security**: Implemented automated security testing with Cypress, Jest**,** and Snyk.
- **Microservice Security**: Championed secure practices in Serverless microservice architectures.
- **Security Consulting**: Provided security guidance to mobile app, web app, DevOps, and product teams. This included consultations on secure passwordless logins, balancing UX with security.

Software Engineer 🔗 **BT Security** (BT)
Sep 2019 - Feb 2023 (3y 5m)

Web and cyber security tool development

- **Threat Intelligence System Architect:** Built a comprehensive Threat Intelligence Analysis System using Django. This system facilitated intelligent data searching based on user needs (location, department), and REST API integration with internal and external systems leveraging Celery and RabbitMQ for message brokerage.
- **Secure Development:** Secured global system protecting confidential information between teams, regions and complying with local legislation on data protection and GDPR.
- **Device Management**: Led the development of a device management solution using React, Node.js, Express and **Docker**.
- **Technical Team Lead**: Provided technical leadership for a small team, fostering collaboration and transitioning the team from Waterfall to Agile methodologies with more customer interaction and less large scale reworks.
- **Agile Project Management**: Owned project estimation, time planning, and end-to-end testing processes.
- **Authentication & Authorization Design**: Designed secure authentication and authorization mechanisms for various users from various countries using LDAP AD systems.
- **Technical Design**: Authored clear and concise patch notes, technical documentation and domain model designs.

Education

Master of Engineering in Computer Science (1st) 🔗 **University of Southampton**

- Web application and network security in a variety of languages including C and Assembly
- Physical security such as lock picking and card forgery
- Web development in JavaScript

Personal Projects

Film Club 🔗 **Github**

The website allows films to be selected from TMDB, an online database as well as scoring them and recording the score in Discord. Made in a small team to facilitate our film club. Setup infrastructure and score functionality whilst supporting my friends learning SvelteKit.
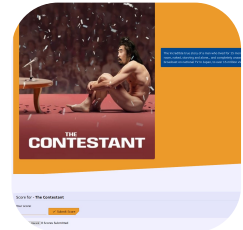
Thai Learning Chrome Extension 🔗 **Extension | Translation Service**

Developed a Chrome extension with typescript which auto translated random text on a page to assist with thai learning on the go. Backed by a Flask translation service which uses Argos Translate an Open Source translation tool with a Thai translation model which I trained and contributed.

Pantry Plugin 🔗 **Github**

Developed a plugin for a note taking application called Obsidian to allow creation of meal plans in CookLang (An open source recipe language). Converts meal plans into an actionable shopping list via Todoist (A task application) REST API

Minecraft Modding 🔗 **Github** / **Curseforge**

Inspired by Frank Herbert's Dune, this mod introduces a method of discovering, mining and processing 'Spice' using heat, pressure and water. Created pixel art, menu interface and geodes/spawning mechanic for spice blocks as well as effects and a withdrawal mechanics. Made on my own using Gradle and Java.

Inventory Management System

Developed a Django and PostgreSQL based inventory management system in my spare time for a Thai electronics company. It assists with the management of metal inventory including rod cutting and 2D sheet cutting. The stack includes React, Typescript, Tailwind CSS, Cypress and Docker. Previously hosted on AWS with Elastic Beanstalk and S3 as well as DynamoDB. Transferred to fly.io for cheaper hosting.
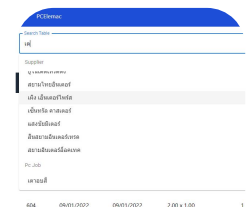
E-commerce Text Pattern Recognition for National Crime Agency

Developed a proof-of-concept web application to assist the NCA in identifying individuals involved in the illegal plant trade. Made in a team of 4 using React, D3, Python and Redis. Developed node graphs using D3 and React to cluster related users based on comments on ecommerce sites. Wrote technical documentation on our system and conclusions.
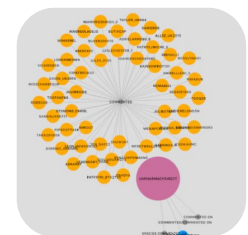
More about Me

Outside of work I learn to speak, read and integrate Thai into my life
Built a COVID-19 ventilation system using C on custom electronic boards with a Thai Electronic company. This was an exciting way to apply my technical skills to a physical solution.

Right now I'm learning
AWS Cloud Practitioner: Currently pursuing the AWS Cloud Practitioner certification following from my previous work with **Elastic Beanstalk**, **S3** and **RDS** to develop a metal inventory management system for a Thai electronics company.