

# Teerawat Wuttiwat

Nonthaburi, Thailand  
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Senior F# Developer | Functional Programming | C Systems, Python, Kafka  
20+ years as a remote software engineer specializing in functional programming (F#, Haskell) and system development. Recent work in Python and Kafka for data streaming. Passionate about fp programming.

## EXPERIENCE

### AuditOne, Remote German — *Smart Contract Auditor*

Jan 2025 - Feb 2025

Audit Mayz protocol developed in Cardano/Plutus/Haskell.

- Audit smart contract written in Haskell before deploying to mainnet
- Only one in the team who can find issues to Haskell logic that could run-time error in the production.
- Understand complex smart contract protocol without any supervision from the developer.

### Wieldmore, Remote UK — *Contract Software Engineer*

Jan 2024 - December 2024

Develop dashboard finance portfolio in full-stack F# stack .

- Develop and refactor Web scraper again using Akka.net, F#, Azure Blob Storage
- Web dashboard using Sutil and F# Fable
- Create authentication using Azure AD B2C and User Flow
- Convert F# to Python using Fable.Python
- Develop WPF in F# to embed in Excel and use in ExcelDNA

### Tallies, Remote US — *Contract Software Engineer*

Jan 2022 - December 2023

Convert event streaming developed in F# to Kafka.

- Upgrade and fix existing F# data pipeline to deploy to Azure Web Job. This include fix parsing, upgrade F# .NET framework and configure Azure.
- Optimize parsing large CSV data (in Terabytes) in F# and store data in PostgreSQL
- Convert from F# Azure EventBus to Kafka + Python micro-service.
- Create Kafka stream and KSQL scripts to convert changes from Kafka Debezium connector to ORE xml configuration
- Create C microservice to calculate data using ORE xml output.

## SKILLS

F#, Haskell, Functional Programming

C, Systems Programming, Python, Kafka

Async/Remote Work

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## Experience

**F# Optimization** - Decrease ETL running time from 2 weeks to 1 day.

**F# Code** - read and understand complex full-stack F# code written in Giraffe, ExcelDNA and Fable

**Azure** use Azure to store F# data in Blob storage. Create EventBus for Kafka alternatives.

**Async Work** Work exclusive in async and remote environments.

## LANGUAGES

Fluent in both English and Thai.  
Code in F#, Haskell, and .NET

## **Department of Public Works, Thailand — *Contract Software Engineer***

Jan 2020 - December 2022

Develop Construction estimation Web-app using F# and Safe stack.

- Discuss and learn from construction domain experts.
- Create domain driven design using F#. Start by coding F# fsx script and compare results with domain experts.
- Create and unit test domain logic in xUnit.
- Create Web application using F# Safe Stack (Saturn, Azure, Fable and Elmish) and SQLServer
- Configure and deploy to on-premise server (Windows Server + IIS)

## **Stone Eagle (formerly NAT), Remote US — *Contract Software Engineer***

Jan 2005 - December 2019

Develop and maintain SCS Web-based auto dealer application in .NET and C#.

- Work as Thailand Technical Lead.
- Join Scrum daily meetings between the US, India and Thailand team.
- Distribute tasks among programmers in the team. Help team members when they have problems with issues. (Both technical and functional domain)
- Work with functional documents written by Business Analysts in the US issues with Functional Document
- Write and review technical documents (TD) before starting coding.
- Optimize monthly reporting calculation when very high load occurs. Extract calculation to background service and optimize C# code.
- Maintain ASP.NET legacy code written and running more than 10 years since VB6. The stack use is ASP.NET, C#, jQuery and SQLServer.

## **TerraGenesis, US — *Software Architecture***

Jan 2003 - Jan 2005

Develop GENII Web-based application for Texas Department of Transportation for entire road and pavement for the entire State of Texas.

- Oversee overall architecture of the entire process of the creating web-based application.
- Coordinate with client, business analyst, web designer, programmer and QA to revise plans for each release.
- Work on interfacing between unmanaged ArcSDE C API and managed .NET environment. GENII is one of the early web-based applications using managed and unmanaged .NET environments.
- Create a custom database proxy using ADO.NET. The proxy will make database constraints that could be changed at run-time.

## **EDUCATION**

## **Oregon State University, Oregon — Master of Computing Science**

Jan 2001 - Jan 2003

Work as research assistant under supervision of Professor Toshimi Minoura

- Fully assistant scholarship
- Teach GIS workshop course using ArcGIS, ArcSDE and ASP.NET

## **Chulalongkorn University, Thailand — Bachelor of Computer Engineer**

Jan 1994 - Jan 1998

### **PROJECTS**

**Weldmore** — Web application to *monitor institution portfolio from real time financial data.*

- F#/Giraffe/Sutil/Akka.net
- F#/ExcelDNA
- Azure BlobStorage

**Tallies** — Convert finance data streaming to portfolio calculation

- F#/SQLServer/EF
- PostgreSQL
- Python/Kafka/Debezium

**BoQ** — Web-application to estimate construction cost

- F#, Fable, Saturn, and Elmish (Safe Stack)
- SQLServer

**SCS** — Web-based application for auto dealer in US

- C#,ASP.NET,jQuery
- SQLServer and SQL Reporting Service

**GENII** — Road and pavement application for TxDOT

- C#, ASP.NET, SQLServer
- Advanced ADO.Net programming