

# SAFE Stack

# Me



- Functional Programmer
- Current (Functional) Languages: F#, Scala
- Team Leader
- Consultant
- Instructor
- <https://echogatetech.com/>

# What are we going to cover?

- SAFE Stack
  - Saturn/Giraffe
  - ^ Azure/AWS - On your own
  - Fable ([fable.io](https://fable.io))
- FAKE builds
- Using Them!

# What is it?

- A collection of F# focused .NET projects
- Functional, high productivity web development stack

F#

# Dispelling Myths

- .NET Runs on all major platforms
- .NET Source is entirely available under friendly licenses (MIT)
- F#/C# are also under friendly licenses
- Developer pool is small but talented and growing

# Motivation

# Aims

- **Functional**
- **Decent (improving) documentation**
- **Coordination (releases and projects)**
- **Modular**
- **Test Coverage**
- **Make things comfortable for industrial use**



# Backend Components

- Giraffe
  - (Functional Micro Framework on ASP.NET Core)
- Saturn
  - Convention Backed Wrapper for Low

# Front End Components

- Fable
  - F# to Javascript Compiler (using native technologies like webpack)
- Fulma (optional)
  - Fable wrapper around [bulma.io](https://bulma.io) for css
- Fable React
  - Use react native components from Fable
- Elmish
  - Bringing the Elm pattern and more to F#

# Between Them

- Native Saturn Controllers
  - Where compatibility is the concern.
- Elmish.Bridge
  - Websocket (stateful)
- Fable.Remote
  - High productivity but F# masks server calls as task/function calls

Demo Time

# Resources

- <https://safe-stack.github.io/>
- <https://safe-stack.github.io/docs/intro/>
- <https://fulma.github.io/Fulma/#fulma/>
- <https://fake.build/>
- <https://saturnframework.org/>

# I'm happy to chat



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