# Andrew Forrester

Lubbock, Texas

awforrester@gmail.com
www.andrew-forrester.com
linkedin.com/in/andrew-forrester
github.com/oneforawe

# Summary

o Software engineer and full-stack web developer – emphasis on JavaScript/TypeScript, Node, React

# Experience

#### Developer, IT Enterprise Applications @ Pacific Dental Services / PDS Health

2021/12 - 2024/05

- Built the majority of a full-stack web-app for office information, released to over 800 dentist offices across the US.
   App includes secure admin login, many API interactions handled both on the frontend and backend, an office-specific image carousel with external image-manager to add and delete images, embedded booklet and PowerBI reports, iframe displays of interactive sub-apps where some external code required modifications, etc.
- Gained approval for and executed a re-write of another web-app in order to implement a feature that required more modular, reusable, and parameterized code. Also drove the adoption and implementation of automatic code linting and formatting.
- Built a template for frontend web-apps written in TypeScript and using React that was based upon and integrated into successful projects. github.com/oneforawe/react-ts

#### Software Engineer Consultant @ ultimumIT

2021/05 - 2023/01

- o Built a web-app using Javascript, React+Redux, Node, MySQL, etc.; deployed onto a Linux DigitalOcean server.
- Designed a RESTful API for data consolidation, display, and downloading of business sales information for a self-serve automated car wash.
- o Built an open-source forked demo at www.edapt.datalux.xyz with extensive documentation on GitHub.

#### AI Fellow @ Insight Data Science

2019/01 - 2019/12

- o Consulted with Docbot Inc. (docbot.ai / satisfai.health) on a new AI medical image solution.
- Built computer vision tools using convolutional neural networks (CNNs) that identify gastrointestinal abnormalities in medical endoscopy images; pushed new mode of operation (pill-cam endoscopy) with 140,000 images.
- Built a development framework for rapid testing and iteration of these CNN models. (See GitHub for code.)

#### AI Researcher @ AGI Innovations Inc / AGi3

2014/10 - 2015/07

- Helped build a system for natural language processing and understanding (NLP, NLU), using a rule-based English text parser and a knowledge network, contributing code in an agile team environment.
- Personally enabled the system to handle complicated clause structures to answer questions regarding news stories.
- Created material for the investor demo to show the advancing abilities of the system and secure more funding.
- Conceived of a process for (potentially) creating human-level social artificial intelligence.

### Skills

- See my web-development demos at www.andrew-forrester.com/demos.html
- o JavaScript/TypeScript, HTML+CSS, React+Redux, Node; Some experience: Python+Django, Less: C#+.NET
- Web Hosting (DNS, Cloud servers, Nginx, Apache, Microsoft IIS), Web Services (AWS, GCP), WordPress.
- o Tools: Git (+GitFlow), SQL-familiar (MySQL, Postgres, Sequelize), jQuery (even in React context), RegEx.
- o Bash, PowerShell: strong experience with shell interaction and scripting/automation, with some sys-admin skills.
- Python + Keras/Tensorflow + AWS (EC2): built neural networks for computer-vision analysis of medical images.

## Education

#### University of California, Los Angeles (UCLA)

2005/09 - 2012/09

- o PhD, Physics (2012 Sep)
- o MS, Physics (2007 Jun)

#### California State University, Long Beach (CSULB)

2000/08 - 2005/05

• BS, Math and Physics (2005 May)