JUSTIN BLACK

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EMPLOYMENT

Software Engineer + Bots Lead, Voice Communications
Orion Labs   May 2017 - Current

- Developed and deployed 15 Python3 services, voice bots, and chat bots for consumer and commercial customers
- Built bridges between the Orion voice communication system and Slack, Microsoft Bot Framework, and radio SIP VOIP calls
- Used latest technology to build bots: STT, TTS, Text and Speech Translation, NLUs, IBM Watson Assistant Conversation, Slack Bots, Microsoft Bot Framework
- Streamlined bot deployment by moving to serverless docker containers in AWS
- Managed and reviewed contributions from an external engineering resource
- Created product specifications and design documents
- Conducted market research to select speech services
- Added features and tests to internal python libraries for bot building and speech services

Senior Mechanical Engineer, Electric Motorcycles
Alta Motors   May 2015 - Oct 2016

- Spearheaded development of Python script which ensured that two databases agreed, eliminated fit problems by updating model+drawings on 200 parts

Mechanical Engineer, Helicopter Engine Parts
General Electric Aviation   July 2007 - Aug 2014

- Co-led design of a helicopter engine module, designed hardware, building analysis models

EDUCATION

AppAcademy, 2017
Coding Bootcamp - 1000 hour curriculum, 80 hour weeks

Tufts University School of Engineering, Medford, Ma
B.S., Mechanical Engineering, 2007

TECHNICAL SKILLS

Python, Flask, Django, Ruby, Rails, Javascript ES6, React-Redux, HTML5, CSS3, SQL, AJAX, SASS, jQuery

PROJECTS

IFTTT Integration A service which sends and receives voice messages from the Orion voice network   live | intro
(Python3, Flask, Oauth) Backend Developer

- Developed and deployed service which provided an action and a trigger on IFTTT.com
- Action: say a voice message to a user in Orion
- Trigger: listen for a word or phrase in Orion and hit an endpoint on IFTTT.com if the phrase is heard
- Built 11 endpoints which vend testing, core functionality, and status checking
- Service uses speech services, oauth tokens, and inspects and sends messages for many users

Open Source Improved multiple Python libraries   github

- objgraph, microsftbotframework, pyluis, last_name

Wiigo   A website to create and join clubs   live | github
(React/Redux, Ruby, Rails 5, AJAX) Frontend+Backend

- Provided beautiful and functional frontend experience with a CSS flexbox layout
- Utilized REST API to deliver performance, scalability, and simplicity
- Deployed images with Cloudinary CDN; serves images more quickly quickly and efficiently than the backend

Pycalculix A python3 library to stretch metal parts   live | github
(Python, matplotlib, scipy) Library Developer

- Developed classes to import/export data to industry standard solvers and meshers
- Provided friendly API to the user
- Stored and manipulated complex data, such as: geometry, materials, loads, constraints, mesh, results
- Distributed it on pypi + Github, published docs