

CAREER PROFILE

Strong technical leader. Dynamic, driven, and accomplished professional with 30 years of software design and development, architecture, engineering experience and success. I thrive learning new technologies, languages, frameworks, and systems. I have a keen interest in the business domain and model, and how the software solution can best address the market. I have comprehensive experience building both enterprise and consumer applications in various domains including IOT, SCADA, e-commerce payments/order/refunds, volunteer organizing & fundraising, display ad serving, SMS text processing, content management, alarm monitoring automation, digital music, financial trading simulation and forecast, vacation activity booking. Committed to ongoing professional development. Active Mentor with MentorNet.org, mentoring computer science students since 2012. I have performed in a broad range of roles including developer, support, management, engineer. My early experience in customer support provides unique perspective into building more maintainable software.

I am a generalist software and systems engineer, seeking a position as a lead or Principal Engineer. I am looking for interesting, challenging work in a great company, great team and a good fit. I seek a position where I can maximize my value to the company. To that end I desire to have significant influence on the core software/system/technology of the company. I bring a unique set of skill, talent and wisdom to the job. I have a laser focused attention to detail. Keep simple things simple and hard things possible. I am a people person. I value inclusive teamwork environments.

AREAS OF EXPERTISE

Current tech stack: Node.js, Python, AWS Cloudformation.

I am “full stack” but with a strong focus on backend, microservices, algorithms, distributed systems and cloud infrastructure i.e. Infrastructure As Code / DevOps. I do UI work when I need to but my interest is in backend technologies. My strengths are in building scalable SAAS systems, architecture, building and managing a software engineering team, fostering good teamwork, identifying technical talent, scaleable solutions. I bring with me a unique set of skills, talent, a keen eye for efficiency and compromise, wisdom.

Toolbelt: Agile, Amazon AWS, Bash/grep/sed/awk, Braintree, C/C++, Infrastructure as Code, Docker, Git, IOT, Javascript, Linux/Unix, Microservices, Modbus, MySQL, Node.js, NoSQL, OOP, OCPP, Paypal, Python, PostgreSQL, Restful API, SAAS, SCADA, Sql, Stripe, Twilio

PROFESSIONAL EXPERIENCE

Independent Contractor/Consultant 2017-Present
Software Engineer for numerous clients on Upwork
Upwork Expert Vetted Top 1% <https://1mikemakuch.com/UpworkExpertVetted>
See my 100% client rating and reviews: <https://www.upwork.com/freelancers/1mikemakuch>
I’ve been specializing with Node/React and Python.

Talent Atlas via Upwork 2023-Present
Principal Engineer
Talent Atlas is developing a software utility for the executive placement area, involving heavy use of OpenAI LLMs. I’ve designed and built the system with help on the UI. Company is currently seeking early adopters and angel funding. Tech stack Node.js, Angular, AWS.

Safe Defend Contractor via Upwork 2022-Present
Principal Engineer
Safe Defend has an on premises alarm/alert system which is comprised of hardware fingerprint scanning devices as well as monitors and a few services running on on premises Linux hosts. The scanners are a small embedded device for which I’ve

successfully overhauled what was a poorly designed and implemented firmware. The central server microservices have had much overhauling as well. Tech stack involves Linux, Node.js, PHP, jQuery.

Delta Thermal Inc via Upwork

2022-2023

Principal Architect/Engineer, Cloud hiring manager

DTI has a thermal imaging sensor for monitoring temperatures of industrial equipment. I designed the original architecture and coded the cloud IOT system for collecting the IOT data, monitoring, alerting etc. Hired and supervised the small dev team that created DTI's IoT system in AWS, ECS microservices, Node, python, embedded systems. I also led the build of the AWS infrastructure in Cloudformation.

BasinSCADA.com via Upwork

2021-2022

Principal Software Engineer

Building various integration servers to bring IOT data into the cloud SCADA operations system. Also building a Modbus "Edge" server to provide more flexibility, control and data aggregation than what is available in traditional Modbus networks. Node.js

EveryMarketMedia.com via Upwork

2019-2023

Principal Software Engineer

Principal Engineer, responsible for all development and maintenance of EMM Query a contact sales web site, a Node/React app employing Google's BigQuery for searching large data sets.

AmPLYPower.com via Upwork

2019-2021

Principal Software Engineer

Designed and built core SCADA/IOT system and cost optimized scheduler controlling EV chargers on Node.js (OCPP), AWS ECS microservices, telematics & GPS/geospatial calculations. Also built the AWS infrastructure in Cloudformation. I am co-inventor of AmPLY's patented control algorithm: <https://patents.google.com/patent/US20210086647A1> AmPLY Power is a clean tech company providing an efficient electric vehicle charging control service from the cloud, being currently being deployed globally to control municipal EV bus charging facilities.

FoodRevolution.org via Upwork

2017-2018

Principal Software Engineer

Software engineer Built custom ordering & payment system, custom CMS system in Node.js, AWS, Braintree, Sequelize

MYROLLCALL

2016

CTO

myRollCall is an all in one solution to aid volunteer organizers in event planning including ticketing, donations and custodial banking. Hired development team and led build and launch of initial myRollCall SAAS website. Collaborated with executive team to identify product space and product strategy.

- MEAN stack MySQL, Express, Angular, Node, Amazon AWS

KIXER

2015

Principal Software Engineer

Display ad service utilizing big data and machine learning. Responsible for application enhancement and maintenance.

- High traffic, Amazon AWS, Elastic Beanstalk, C++.

TEXT 4 TAKEOUT

2014

Principal Software Engineer

A menu and ordering app built for food trucks/trailers that can't afford to have their own custom mobile app. Customers text the food trucks #, receive a text version of the menu and place order and make payment. Then they just walk up to the truck and pick up their order. We had the prototype functioning with pilot customers, but couldn't land funding so it folded. Node.js backend, Twilio, Bandwidth SMS providers.

RESORT SCOOP

2013

Cofounder/CTO

Vacation Activity Booking SAAS. Researched the market space, problems, solutions. Performed application development, hired contractors, built prototypes, demos, talked to potential customers, users, investors, etc.

- Drupal, LAMP, MEAN, Twilio, Rackspace, Amazon AWS, Stripe, Paypal

STUDENT

2012

- Returned to University of Texas, completed Bachelor of Science in Computer Science

SELF EMPLOYED

2001-2011

Software Engineer, Consultant, Investor

- Created Muzikbrowser desktop digital music player. Backtest a financial tool for testing automated trading algorithms against historical market data.
- Investing/Angel, Consulting, Futures trading
- Consulting on patent litigation, software technology for investment purposes
- Advisory Board Member for Advanced Reality Inc., collaboration software

VIGNETTE CORPORATION

1996 - 2000

Principal Engineer (employee #7)

Vignette's Story Server application was one of the first enterprise class web content management systems (written in C++/Java for multiple platforms: Solaris, Aix, Windows)

- Primary role design and development of core backend services. and general software engineer duties
- Created patented personalization functionality; 1st inventor US Patent 6,330,592B1
<https://patents.google.com/patent/US6330592B1>
- As an early startup employee, gained much experience with the many facets of a rapid growth venture funded startup through Vignette's successful IPO in 1999 (*Vignette grew to 1500+ employees when I resigned in May 2000*)

ABM DATA SYSTEMS, Austin, TX

1985 to 1996

Alarm System automation software.

R&D Manager (1990-1996) *My early management experience included having 25 direct reports spanning support, services, and R&D.*

Customer Support Manager (1988-1990) *My early experience supporting software systems has had a significant influence on the rest of my software engineering career. I have a relatively unique perspective of how software should be built to be more maintainable.*

Software Engineer (1985-1988) *Cut my programming chops on mini computers running the PICK OS. Also performed extensive travel doing installations and training.*

EDUCATION

Bachelor of Science in Computer Science, The University of Texas at Austin 1980s, completed 2012. University of Texas Computer Science Department consistently ranks in the top 10 <https://www.usnews.com/best-graduate-schools/top-science-schools/computer-science-rankings>

INTERESTS

Member of Mensa, Intertel. Enjoy triathlon training, scuba travel.

LINKS

Patents

Real-time electric vehicle fleet management

<https://patents.google.com/patent/US20210086647A1>

Method, memory, product, and code for displaying pre-customized content associated with visitor data <https://patents.google.com/patent/US6330592B1>

Upwork

Profile: <https://www.upwork.com/fl/1mikemakuch>

Top 1% <https://1mikemakuch.com/UpworkExpertVetted>

LinkedIn

<https://linkedin.com/in/1MikeMakuch>

Github

<https://github.com/1MikeMakuch/README>

