Travis M. Clarke

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EDUCATION:

Master of Business Administration, May 2014
The R.B. Pamplin College of Business
Virginia Polytechnic Institute & State University, Blacksburg, VA
GPA: 3.6/4.0 - Magna Cum Laude

Master of Science in Industrial & Systems Engineering, May 2014
The Grado Department of Industrial and Systems Engineering
Virginia Polytechnic Institute & State University, Blacksburg, VA
GPA: 3.7/4.0 - Magna Cum Laude

Bachelor of Business Administration in Marketing, December 2009
Minor: Economics
James Madison University, Harrisonburg, VA
GPA: Overall: 3.2/4.0, Major: 3.5/4.0, Dean's List, Honors Program

EXPERIENCE:

Sinclair Broadcast Group – Software Development Engineer III
Seattle, WA
July 2018 – Present (4 mo.)
Full-time

I am the senior engineer on the Sinclair Storyline team – Storyline is a proprietary CMS (Content Management System) powering the online publishing platform for hundreds of local news stations and brands across the country. Along with several other engineers I maintain the Middle Tier, which connects the Platform 2.0 APIs with several different front-end platforms. The core projects in the Middle Tier include: MrssAdapter – a REST API which transforms requests from the backend and format them for ingestion in the client-side applications (OTT (e.g. tvOS, FireTv, Roku, etc.) and mobile (e.g. Android, iOS) applications); Render – a scalable client rendering engine for the front-end application bundles; API Tools – a Python API client for interacting with the core Platform APIs, MrssAdapter, and several third-party API integrations. Furthermore, I develop and maintain automation scripts and command-line tools (Python, Golang and/or Shell) for automating repetitive data management tasks, such as content generation, site tree structuring, and feed ingestion.

Projects: MrssAdapter, Feed Ingest Service, Stirr Validator, API Tools

Homesite Group, Inc. – Sr. Software Engineer
Seattle, WA
March 2017 – June 2018 (1 yr. 4 mo.)
Full-time

I am the senior engineer responsible for the AmFam Connect redesign – a dynamic, next generation software platform employing a scalable, partner-centric content management system (CMS) design, built using React/Redux with an underlying RESTful, microservice architecture (MSA). I engineer scalable microservices, or integrate with existing ones if legacy versions exist in Platform 2.0, using SpringBoot and NodeJS (e.g. I18n, Auth, Validation). I develop ubiquitous, POSIX-compliance utility scripts using Bash for automating mundane, everyday build and deployment tasks; such as check: a simple TCP/UDP ping tool and jwt-token-generator: a command-line JSON web token generator. Additionally, I authored a universal React/Redux boilerplate and from its development, several reusable React utilities for monitoring, side effect handling (API middleware), and component generation have spawned. Moreover, the project evolved from a boilerplate to a prototype to the core platform on which the slated dynamic recommendation engine (DRE) and Connect Portal are being built – a portable, dynamic, app-based portal and recommendation system to intelligently launch customers into the appropriate insurance flow (e.g. auto, home, renters). I thoroughly document my code, ensuring reusability and compliance with both industry best practices and accepted coding standards, drafting design docs utilizing the simplicity of markdown (e.g. Gitbook, Hugo) paired with the intricacy of UML diagrams. Lastly, I provide support and assistance for all A/B testing experiments.

Projects: AmFam Connect, Refresh UI, Platform 2.0, Optimizely Experiments

AOL, Inc. – Software Engineer
Seattle, WA
June 2016 – December 2016 (7 mo.)
Full-time

I collaborate with product managers, designers, and engineers across geographically disparate teams architecting, engineering, and implementing global, industry-leading advertising platforms. I troubleshoot critical/blocker frontend, API, and system-level production issues related to the ONE Video demand-side advertising platform. I design and document scalable applications using UML class and component diagrams and collaborate with Operations Engineers to ensure applications are production-ready as well as able to be effectively monitored and tested. I build Datadog dashboards to provide high-level event and metrics monitoring. I package and distribute POSIX-compliant binary executables and Python/Bash/Shell scripts for internal API monitoring/testing, task automation, and data processing; distributed scripts include mango: a parallelized testing tool for the Mango API and get-els: an enterprise login token retrieval tool. For automating integration and function testing, I leverage the Robot Framework (Python) and Protractor (JavaScript), respectively. I analyze business and technical requirements and design modern OOP architectural solutions that cater to those specifications. My major accomplishments include: Build a new RESTful Spring API for the Creative Management Platform. Upgrade the MaxMind GeoIP mapping and integration used by the ONE Video demand-side platform Customer Targeting System. Build ELK (Elasticsearch, Logstash, and Kibana) pipeline for the Mango API (written in C) to provide real-time API audit logging for SOX compliance. Integrate cookie-syncing and verified unit testing (using Scala) for mobile advertising marketplace Nexage (now part of Millennial Media).

Projects: ONE Video, ONE DSP

PIETech, Inc. – Software Engineer
Powhatan, VA
December 2015 – January 2017 (1 yr. 1mo.)
Full-time

I collaborate on robust, web-based, client-facing software, including the number one financial planning software in the industry (MoneyGuidePro). I created, designed and architected the Blocks platform – a portable, modular application, built using the Aurelia framework on top of a NodeJS backend – in an effort to evolve and scale the existing web platform for delivery to a broader and younger target audience. I have daily interaction/engagement with the following frameworks: Aurelia, Knockout.js, ASP.NET MVC 5. I utilize the latest OOP design patterns and ECMAScript 2015 (ES6) dialect features for integration with a Node.js event-driven runtime. In summary, I produce forward-thinking, full-stack JavaScript applications leveraging simple conventions and empowering creative design. Provide cross-team JavaScript consulting for advanced pattern and feature implementations. Throughout the process of building and implementing innovative, mobile-first financial planning applications, I authored several open-source shims and packages (e.g. image-map, wookmark-node, highcharts-more) to "adapt" popular libraries for integration with our applications.

Projects: MoneyGuidePro, myMoneyGuide, Blocks

Multiple locations

May 2013 – Present (5 yr.)

Freelance – Applications Engineer Part-time

I am enamored with anything technology. I have dabbled with everything from corporate websites, blogs and React applications, to systems programming with C, C++, and Golang, to MacOS development (native apps, launch agents/daemons and system monitors), to command line interface scripting (Shell/Bash/Golang/Python) with over 200 utility scripts as on *this* writing to mobile development (React Native and Android) to penetration testing (*my personal favorite!*) and have even starting working on a *small* Linux distribution. I am in the process of converting my knowledge, notes, experiences, and designs to a blog to proliferate my online presence and give back to the software community that so graciously educated and informed me! I have contributed to numerous open-source repositories (too many to count) and have published numerous JavaScript and Python utilities; one of my most popular creations being TableExport – "The simple, easy-to-implement library to export HTML tables to xlsx, xls, csv, and txt files" (tableexport.v5.travismclarke.com). I crave knowledge, continuously researching the latest frameworks, standards, and conventions in an attempt to stay modern amongst the dynamism of today's expeditious software lifecycle and mercurial trends.

Projects: TableExport, QueryTag, MenuAnimate, Rotate.js, TweetDash

Alliance Pointe LLC – Web Developer & Analyst **September 2014 – December 2015** (1 yr. 4mo.)

Pennsylvania Ave – D.C. Office Full-time

I lead custom application development projects throughout the entire systems development life cycle. I engineer custom applications using self-leadership and adept programming. I develop new user-facing software, build reusable code libraries, and contrive UI/UX designs. PHP mail. MySQL database integrations. I perform routine memory profiling, CPU profiling, and web performance optimization to ensure maximum speed and scalability of my designs. I manage back-end and front-end SEO elements such as .htaccess, robots.txt, and metadata. I build inbound organic search traffic and improve search engine results pages (SERPs), systematically recording, examining and monitor site analytics. Many open source tools that I developed were inspired by challenges I faced in the industry.

Projects: AlliancePointe corporate website, Geolocal, AFMO Manpower Requirements Determination (MRD)

Virginia Polytechnic Institute & State University - SASS Tutor / Graduate Assistant **August 2013 – May 2014** (9 mo.)

Student Athlete Academic Support Services / Business Information Technology (BIT) Department Part-time

I am an adept and passionate instructor who both mentors and tutors Virginia Tech student athletes in the fundamentals and advanced topics of business, mathematics, and engineering. The following is a list of subject-areas in which I teach: Business Information Technology, Statistics, Information Systems, Programming, Supply Chain Management, Business Process Improvement, and Text Mining. In my role as a Graduate Assistant at Virginia Tech, I work directly under leading research professors in the BIT department creating, revising, and distributing class assignments and solutions manuals. In addition to assignment creation, I track and database grades and participation scores using the Top Hat Monocle: Classroom Response System. Some leading software that I have generated assignments/projects for are: LightSIDE text mining engine, SCM Globe supply chain modeler, and Bizagi process modeler. Other job functions include facilitating classroom lectures or attending conferences when a professor is absent or unavailable, homework grading, exam grading, exam facilitation, student technical support, and scholarly article review.

Courses: Business Process Improvement (3 semesters), Advanced Supply Chain Management (3 semesters), Management Science (1 semester)

… Additional work experience available upon request

COMPUTER SKILLS:

Proficiency: (Beginner: 1 – Expert: 10)

Software (10)	JavaScript, Python, Shell (Bash, Zsh, Fish), Markdown, Web (HTML, CSS).
(8)	Golang, Julia, PHP
(6)	C/C++, C#, Ruby, Scala, Java, Haskell, Elixir, OCaml.
Frameworks (10)	**JS:** React; **Node:** Express
(7)	**JS:** Aurelia, Angular, Knockout.js; **Node:** Loopback, Socket.io; **Java:** SpringBoot; **Python:** Flask, Django; **Golang:** Hugo; **C#:** ASP.NET.
IDE/Editor (10)	Intellij, Atom, Vim, VSCode
Tools (9)	Git, npm, yarn, tmux, Gradle, Docker, VMWare, Wireshark
Databases (9)	MongoDB, MySQL, SQLite, Redis.
(7)	PostgreSQL, CouchDB.
Cloud (10)	Digital Ocean, AWS
Servers/Runtimes (8.5)	Apache, Nginx, OS X, NodeJS, Synology
Operating Systems (8.5)	UNIX, Linux (Debian/RedHat), Mac (OS X 10.7+), Raspberry Pi (Raspbian), Android (API 2.0+).
Statistics (8)	MATLAB, JMP Pro 11, Minitab 17, LINDO, Mathematica.
Simulation (8)	Simio 6, SCM Globe

CERTIFICATES:

- Oracle Certified Associate Java SE 8 Programmer
  [License #: 240561891OCAJSE8]
- CompTIA Linux+ Powered by LPI
- LPIC-1 System Administrator

ACTIVITIES:

Professional
Institute of Industrial Engineers (IIE)
Virginia Tech MBA Association
VT Hybrid Electric Vehicle Team

Social
Sigma Chi Fraternity
Github: Git Repository Hosting
Stack Overflow: Stack Exchange Network

Extracurricular
Virginia Tech Chess Club
Arlington Chess Club
Music (Guitar)