

## **Sean Baker**

Leveraging a strong background in technology with a specific passion for coding, I enjoy growing and building as a software developer. I originally got a 2 year degree and couldn't afford to go longer at the time. After making my way through many small businesses I decided I was done with small office politics. And went back to school where I am currently maintaining a 3.91 GPA after 3 Semesters. My enthusiasm for building relationships and unwavering commitment to continuous learning empower me to address complex technical challenges effectively, transforming them into innovative strategies. This adaptability to the dynamic nature of consulting positions me to significantly improve client satisfaction and advance the development of cloud solutions. Moreover, my ability to foster meaningful connections ensures successful partnerships and enduring client relationships.

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## **Summary**

I am an experienced software engineer with a proven track record in various industries. My expertise spans from low-level C and C++ programming to Java web development and cloud architecture. Currently, I am pursuing dual degrees in Computer Engineering and Computer Science at Old Dominion University. My passion for these fields propels me towards innovation in technology, and my academic achievements have earned me a spot on the Dean's List, reflecting my dedication to excellence.

Most recently, I contributed to the development of an NCAA-sponsored eLearning platform at fieldXperience. In this role, I integrated Brightspace using OAuth and SAML 2.0, showcasing my competencies in cloud computing server management and software development. Before that, I worked on low-level C code for custom-made FPGAs used in manufacturing automation. This experience taught me how to design every library from scratch, including the library that handled the TCP/IP stack, enabling us to process millions of packets per second and communicate with the PLCs.

I am familiar with Intel's Quartus, VHDL, C, C++, Java, Python, and JavaScript, and I have partially learned Prolog, Fortran, and even Forth. I am obsessed with speed in my code and constantly compare different compilers, such as Google's LLVM for vectors, using tools like Compiler Explorer to see how different compilers convert C++ into assembly.

My commitment is to leverage my educational background and software development skills to make a meaningful impact in the tech industry. Much of modern development focuses on maintenance, and speed is paramount. My strengths lie in my strong communication and interpersonal skills, which enable me to effectively bring people together. However, I have no desire to be just a cog in the AI machinery. I am passionate about CppCon and enjoy the history of programming languages, appreciating how many problems were solved long before most

modern-day languages themselves were invented, like substring searches aka Knuth-Morris-Pratt Boyer-Moore Algorithm.

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## **Education**

### **Old Dominion University**

Norfolk, VA

Bachelors, Computer Science

August 2023 – Present

Made Deans List Spring 2024

Expected graduation end summer 2025

### **Piedmont Valley Community College**

Charlottesville, VA

Associates, Computer Science

2014 – 2016

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## **fieldXperience**

Software Developer

July 2022 - September 2023 (1 year 3 months)

United States

- Built an eLearning Platform that connected with Brightspace using OAuth and SAML 2.0, integrating a payment platform, user interface, and achievements with a Brightspace backend for NCAA-sponsored courses.

### **Visi-Trak Worldwide, LLC**

8400 Sweet Valley Drive, #406, Valley View, Ohio 44125-4244

Phone: 434-249-3434 | Fax: 216-524-9594

Software Developer

January 2019 - May 2022 (3 years 5 months)

United States

- Worked with PLCs and HMI's for a small 15 person company with only 1 active software developer maintaining 400k lines of code.
- Despite this the companys IP had incredible value and was installed in Die Cast factories all over the world. The original software developer had built everything from scratch using no libraries but the windows library when he needed to. This allowed his software to be faster than most things ive ever seen, allowing him to capture 100,000's of datapoints in milliseconds.

- Oversaw project upgrading from Cyclone 2 processor on FPGA to Cyclone IV.
- Studied Mechanical and Electrical Engineering to familiarize myself with the project and company completely
- Updated Windows Mail Slots to Windows Sockets for Inter-Process Communication.
  - System Analysis and Planning: Conducted a thorough analysis of the existing Mail Slot implementation, identifying performance bottlenecks and security vulnerabilities.
  - Design and Development: Designed and implemented a new communication architecture using Windows Sockets (Winsock), ensuring robust and secure data exchange.
  - Integration and Testing: Integrated the new socket-based communication system into existing applications. Performed extensive testing to validate functionality, performance, and security.
- Stopped wasted resources on a 5-year outsourced Python project that could not handle the throughput. Several items in the BOM failed to meet distribution standards.
- Implemented several specific requirements for companies like Mercury Marine, Honda of Canada, and Walker Die Casting.

### **Medicalmary.com**

WordPress Developer

May 2021 - October 2021 (6 months)

Online

- Managed Cloudflare networking, firewall upkeep, WHM, MySQL, load balancing, and cybersecurity.

### **Edison 2**

Software Engineer

November 2015 - November 2017 (2 years 1 month)

Charlottesville, Virginia, United States

- Developed a dashboard navigation system using Automotive Grade Linux, worked with intel on a drop in self driving car kit.

### **Campus Computer Repairs**

Owner

November 2016 - November 2018 (2 years 1 month)

Charlottesville, Virginia, United States

- Managed day-to-day operations of the repair business, ensuring high-quality service and customer satisfaction.
- Worked with various local businesses such as Blue Ridge Graphics, Alloy Workshop
- Fixed IT problems, anything from data recovery to recovering computers infected with ransomware
- Installed Firewalls network devices such as NAS systems and other types of servers.

- Developed business strategies that increased client base and revenue.
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## **Skills & Interests**

## **References**

- Mark Vann – Owner, Visi-Trak Worldwide LLC – (434) 249-3434
- Mark Cable – Business Operations Manager and Program Coordinator, IATFIW-CN – (571) 283-3142
- Edwin Otero – Junior Solutions Engineer at GovSmart, Inc. – (757) 897-6344
- Jehu Martin – Standard and Poor's – (434) 981-9372
- Oliver Kuttner – Edison2 – (434) 806-2435

## **Soft Skills**

- Committed to continuous learning and adaptation.
- Can learn anything
- Can leverage any and all tools at my disposal to find better ways to be effective
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- Excels in clear, effective communication.
- Organized and focused with excellent time management.
- Capable of performing under pressure.
- Exhibits a strong work ethic and dedication.
- Experienced in leadership and team guidance.
- Skilled in fostering collaboration across teams.
- Proficient in problem-solving and innovation.
- Adept at building and maintaining strong relationships.

## **Technical Experience**

- AWS Cloud
- Ubuntu
- Gen-AI
- PL/SQL
- SQL
- Java
- Linux
- Python
- C++
- C

- Quartus
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