

Grayson Bray Morris

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HOW TO READ THIS CURRICULUM VITAE

The left & right columns provide the usual list of education & experience, here in forward chronological order. The human story is in the middle column.

EN ●●●●●● (native)
NL ●●●●●● (C2 fluent)
AR, EL, ES, RU, ZH ●
(dabbler)

1984

HIGH SCHOOL DIPLOMA North Carolina School of Science and Mathematics

NCSSM opened in 1980 as the first of its kind in the US: a residential high school for academically gifted students, focused on science, technology, engineering, and math. Applicants undergo a rigorous selection process.

NL EQUIVALENT: VWO

1989

BSc MATHEMATICS University of North Carolina at Chapel Hill

A broad liberal arts education with a mathematics specialization.

COURSEWORK Advanced calculus | Algebraic structures | Differential equations | Differentiable manifolds | Geometry of curves and surfaces | Linear algebra | Real analysis | Topology

PROJECT In-depth review of Hermann Weyl's classic text *Symmetry*

CHANCELLOR'S AWARD FOR STUDENT EXCELLENCE 1986 (East Carolina University)

1993–96

PHD CANDIDATE COMPSci (degree not completed) University of North Carolina at Chapel Hill

UNC-CH has been a leading center of virtual environments research since the field's early days.

MSC-LEVEL COURSEWORK Algorithm analysis | Architecture & implementation | Automata | Complexity | Data structures | Graphics | Operating systems | Software design

RESEARCH Virtual environments under Fred Brooks

NSF GRADUATE RESEARCH FELLOWSHIP 1995

MY STORY

In 1981, at the age of 14, I applied to the North Carolina School of Science and Mathematics. After a highly competitive selection process, I was accepted, and I graduated with my **HIGH SCHOOL DIPLOMA IN JUNE 1984**.

I took a year off, then went to college. With a perfect 4.0 / 4.0 GPA my first year, I was eligible to compete for the university's **AWARD FOR FRESHMAN EXCELLENCE**. Thanks to my additional activities, including volunteer work with The Hunger Project, I won!

I'd initially planned to study art, and chosen my university accordingly. But the sciences soon drew me back in, so in 1987 I transferred to a university that was stronger in that area.

In 1988 I was awarded one of four international student grants to assist NFRA (now ASTRON) staff members in their astronomical research. Those twelve weeks in Dwingeloo produced **FOUR ACADEMIC PAPERS ON RADIO ASTRONOMY IMAGING**. In late August I returned to the US and completed my **BSc IN MATHEMATICS IN DECEMBER 1989**.

During my final semester of college, I was **HIRED TO TEACH PRECALCULUS**. I loved it! The university hired me for several more semesters over the years, including a summer program for disadvantaged students.

In the fall of 1991 I gave birth to my first child, and I spent the next two years at home. In 1993 I started a **PHD PROGRAM IN COMPUTER SCIENCE** at UNC, as part of Turing Award winner Frederick P. Brooks' Architectural Walkthrough team. (Read the 2004 article "[Massive Model Rendering System](#)" for a brief project overview.) I worked hard both in class and on the team, and in 1995 I was awarded a **NATIONAL SCIENCE FOUNDATION GRADUATE RESEARCH FELLOWSHIP**.

As fate would have it, a year later **IBM** made me an offer I couldn't refuse, and I left school sans PhD. (By then I was a single mother working to make ends meet.) Big Blue hired me to implement graphics algorithms in assembly on an exciting new parallel architecture. Astonishingly, IBM canceled the project between my interview and my first day of work, so I ended up **PROGRAMMING THE G.729A SPEECH CODEC** on a different architecture.

1988

SUMMER INTERN

Netherlands Foundation for Research in Astronomy (ASTRON)

Three-month grant to work with Stefi Baum & Chris O'Dea on radio astronomy imaging.

PAPERS

O'Dea, CP, SA Baum, C Stanghellini, GB Morris, AR Patnaik, and Gopal-Krishna. "[Multifrequency VLA observations of GHz-peaked-spectrum radio cores](#)." Astron. Astrophys. Suppl. Ser. 84 (1990): 549–62.

Stanghellini, C, SA Baum, CP O'Dea, and GB Morris. "[Extended radio emission associated with GHz-peaked-spectrum radio sources](#)." Astron. Astrophys. 233 (1990): 379–84.

O'Dea, CP, SA Baum, and GB Morris. "[CCD observations of GigaHertz-peaked-spectrum radio sources](#)." Astron. Astrophys. Suppl. Ser. 82 (1990): 261–72.

O'Dea, CP, SA Baum, GB Morris, DW Murhpy, & AG de Bruyn. "[Optical and radio imaging of powerful, ultracompact GHz-peaked-spectrum radio sources](#)." Proceedings of the ESO Workshop on Extranuclear Activity in Galaxies (1989): 79–84.

1989–94

INSTRUCTOR

University of North Carolina at Chapel Hill

Taught various courses to first-year university students.

FALL 1994 Freshman precalculus.

FALL 1993 & SPRING 1994 Introduction to computer science (lab sessions).

SUMMER 1990 College algebra for incoming minority freshmen with demonstrated difficulties in mathematics.

FALL 1989 - SPRING 1991 Freshman precalculus.

1996–97

SOFTWARE ENGINEER

International Business Machines Corp.

Implemented the G.729A audio compression algorithm in assembly on IBM's Mwave digital signal processor.

1997–99

SOFTWARE ENGINEER

Billions of Operations Per Second Inc.

Ported the OpenGL 3D graphics API to assembly on a four-core instantiation of BOPS' synchronous MIMD iVLIW ManArray architecture. See right column for patents.

1999–present

COFOUNDER

Morris-Jacobs Child Dev & Chaos Mgmt

Managing an intensive field research project into offspring development. Responsible for subjects' care and feeding, waste management, sensory stimulation, dual language acquisition, conflict resolution, education & acquisition of social skills. Secondary tasks include subject transportation, environmental maintenance, and sustenance preparation. (Grain of salt available upon request.)

2002–2019

OWNER

Dutch-American Translations & Copy

Translation & writing. Highlights:

DE CORRESPONDENT | 2015–19
Translated dozens of articles for this ad-free platform devoted to thoughtful journalism.

TECHWATCH BOOKS | 2018
Translated Rene Raaijmakers' technology-heavy book *ASML's Architects* for the US market.

BITS&CHIPS | 2016–18
Translated and edited the magazine's annual English-language issue for the Dutch high-tech industry.

NANOLABNL | 2013
Took scientists' input and wrote a successful €26M grant proposal to fund QuEEen (quantum electrical engineering) under NWO's National Roadmap for Large-Scale Research Facilities.

MY STORY CONTINUED

Meanwhile, the team from IBM's canceled project spun off a new startup called **BOPS**, and I soon joined them to implement graphics algorithms in assembly on the new parallel digital signal processor they'd developed. (Read the 1998 article "[New High-End Architecture](#)" for a brief overview of this amazing system.) These were dynamic, creative years, and I was privileged to contribute to **FIVE PATENTS**.

Along the way, I met and married a charming Dutchman. Our son was born in 1999, and our daughter nineteen months later. I spent the next few years at home, working at least as hard as I had in industry. (It's been said that **RAISING A FAMILY** hones vital work skills such as multitasking, leadership, planning, determination, and efficiency. I certainly won't argue with that.)

In the spring of 2002 we moved from the US to the Netherlands. I was ready for a new challenge, so I started putting my language skills to use as a translator. I **FOUNDED MY OWN COMPANY** that fall, and spent the next seventeen years **TRANSLATING AND COPYWRITING** for corporate, government, and private clients. I loved the freedom — work at midnight in my pyjamas! — and the variety, from research grants to novels.

During this time I also kept a few toes in the programming pool through web-based projects, mostly for myself but also for an occasional client.

I eventually started to miss going deep instead of wide, and once the kids were mostly grown, I no longer needed the freelance degree of career flexibility. So in 2019 I started looking for a place where I could sink my teeth into one long-term project as part of a close-knit team. I found exactly what I was looking for in a tech company named **SAMOTICS**, and spent a few very enjoyable years in Leiden as a **FULL-TIME TECHNICAL CONTENT WRITER**.

I also volunteered for a year with the **DUTCH COUNCIL FOR REFUGEES**, an NGO that defends the rights of asylum seekers in the Netherlands. This was profoundly rewarding work and I am awed by "my" refugees' hope and resilience after terrible suffering. Nearly every day I heard sentences like "After the police beat me unconscious, they left me in a ditch to die."

In 2024 I took early retirement. Now I spend winters on open courseware at MIT (quantum computing with Peter Shor! Linear algebra with Gilbert Strang!), and summers gardening in the back yard and enjoying sunsets over the lake on our new-to-us LM 27.

1997–99

PATENTS

Billions of Operations Per Second

US 7,962,667 (2011) Pechanek, Strube, Barry, Kurak, Busboom, Schneider, Pitsianis, Morris, Wolff, Marchand, Rodriguez, Jacobs.

[System core for transferring data between an external device and memory.](#)

US 6,748,517 (2004) Pechanek, Strube, Barry, Kurak, Busboom, Schneider, Pitsianis, Morris, Wolff, Marchand, Rodriguez, Jacobs.

[Constructing database representing manifold array architecture instruction set for use in support tool code creation.](#)

US 6,622,234 (2003) Pechanek, Strube, Wolff, Barry, Morris, Busboom, Schneider.

[Methods & apparatus for initiating and resynchronizing multi-cycle SIMD instructions.](#)

US 6,167,501 (2000) Barry, Pechanek, Drabenstott, Wolff, Pitsianis, Morris.

[Methods & apparatus for ManArray PE-PE switch control.](#)

US 6,151,668 (2000) Pechanek, Drabenstott, Revilla, Strube, Morris. [Methods & apparatus for efficient synchronous MIMD operations with iVLIW PE-to-PE communication.](#)

2002–present

SOFTWARE ENGINEER

Morris Code NL

Web-based projects for work and fun. Highlight: designed & built the **PHP/MYSQL** engine for a system to process natural language queries on a national energy provider's website. Contributed to open source osCommerce and Zen Cart projects.

2020–2023

PRINCIPAL WRITER

Samotics BV

As **LEAD WRITER**, I helped our engineers & executives explain our technology (electrical signature analysis) and our mission (to end unplanned industrial downtime & energy waste). As **LEAD EDITOR**, I maintained our style, tone & voice guidelines and served as a coach for writing quality across the company.

2023–2024

VOLUNTEER LEGAL ASSISTANT

VluchtelingenWerk Nederland

Helped newly arrived refugees navigate their interviews with the Dutch immigration service.

READ MORE AT vluchtelingenwerk.nl/en/



I wrote short stories for years, some of them published. READ THEM AT [github](#)