

Computer Science Careers Comparison Chart

Career	Skills Needed	Education/Training	Growth Outlook	Compensation
Software Developer / Engineer	Programming (e.g., Java, Python), problem-solving, teamwork	Bachelor's in CS or related field	17% growth (2023–33) — much faster than average	Median ~\$133,080/year (May 2024)
Web Developer	HTML, CSS, JavaScript, responsive design	Bachelor's or coding bootcamp	Steady demand	Median ~\$80,000/year
Mobile App Developer	Swift/Kotlin, UI/UX, cross-platform tools	Bachelor's or bootcamp	Strong demand	Median ~\$90,000/year
Game Developer	C++, game engines (Unity/Unreal), creativity	Bachelor's in Game Dev, CS, or related field	Growing niche field	Median ~\$85,000/year
Data Scientist	Python/R, statistics, ML, data visualization	Bachelor's (often Master's)	42% growth (2023–33) — extremely high	Median ~\$135,000/year
Data Analyst	SQL, Excel, visualization (Tableau, Power BI)	Bachelor's	Good demand	Median ~\$82,000/year
Machine Learning Engineer	ML frameworks, Python, deep learning, linear algebra	Bachelor's (often Master's)	High growth in AI	Median ~\$140,000/year
Cybersecurity Analyst	Security tools, risk management, network knowledge	Bachelor's + certs (Security+, CISSP)	41% growth (2023–33) — extremely high	Median ~\$110,000/year
Penetration Tester (Ethical Hacker)	Kali Linux, pen-testing tools, scripting	Bachelor's + certs (CEH, OSCP)	High demand in cybersecurity	Median ~\$105,000/year
Digital Forensics Analyst	Forensic tools, investigative techniques, legal knowledge	Bachelor's + forensics training	Growing with rising cybercrime	Median ~\$95,000/year
Network Administrator	Network protocols, hardware	Bachelor's or certs (CCNA)	Steady demand	Median ~\$80,000/year

	configs, troubleshooting			
Systems Administrator	Unix/Windows, scripting, server maintenance	Bachelor's or certs (CompTIA, Microsoft)	Steady demand	Median ~\$82,000/year
Cloud Engineer / Architect	AWS/Azure/GCP, networking, containerization	Bachelor's + cloud certs	High and growing with cloud adoption	Median ~\$130,000/year
Computer Hardware Engineer	Circuit design, hardware testing, embedded systems	Bachelor's in EE or Computer Engineering	Steady demand	Median ~\$136,230/year
Robotics Engineer	Robotics frameworks, control systems, mechatronics	Bachelor's in Robotics or related engineering	Growing with automation and AI	Median ~\$100,000/year
Computer Science Researcher	Advanced algorithms, academic writing, critical thinking	Master's or Ph.D.	Growth in academia and R&D	Median ~\$125,000/year (varies widely)
Database Administrator (DBA)	SQL, database optimization, backup/recovery	Bachelor's + DBA certs	Steady demand	Median ~\$90,000/year
UX/UI Designer	Design tools (Sketch, Figma), user research, prototyping	Bachelor's in Design or related field	Strong demand in product teams	Median ~\$85,000/year
Technical Project Manager	Project management, Agile/Scrum, communication	Bachelor's + PMP or Scrum certs	Good demand across industries	Median ~\$95,000/year