

## DSPG 2020 Intake Survey Responses Summary

### Intake Survey Respondents

	Total	ISU	OSU	UVA	VT	VSU
Total in Program	61	12	14	24	5	6
Total Respondents	58	10	13	24	5	6
Fellows	21	3	6	8	2	2
Interns	37	7	7	16	3	4

### Q: How did you find out about the DSPG program?

Two primary methods:

1. Personal Recommendations (colleague, faculty, Dean, other)
2. Listservs, websites, emails

ISU: Fellows	Oregon State: Fellows	UVA: Fellows	VT: Fellows	VSU: Fellows
Faculty member Personal Recommendation ISU email	Department email My advisor Faculty member Listserv announcement	Announcement (Indeed/LinkedIn) ASA yearly internship list CMU Heinz College Career Services Listserv announcement Personal recommendation Personal recommendation from 2 people Recommendation by past intern Self-discovery, Grace Hopper Conference	Recommendation from Dean Virginia State email	Faculty Recommendation Personal recommendation
ISU: Interns	OregonState: Interns	UVA: Interns	VT: Interns	VSU: Interns
Email announcement Email from ISU Extension Listserv announcement Notice board Personal recommendation Personal recommendation	Browsing OSU programs CS Program Email at my University Facebook post by career center Faculty posted to an email list Instructor of a class OSU website Personal recommendation	Career center listserv Department advertising Flyer at UVA Former intern (last summer) Listserv Listserv announcement My own research Personal Recommendation Personal recommendation Previous year intern Professor recommendation Searching for biomedical data science opportunities Sent in email at lab	Personal recommendation Professor Recommended to CS students by advisor School Email	Listserv announcement Listserv announcement Listserv announcement

### Q: I am interested in pursuing a career related:

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Total
Data Science	39	14	4	1	58
Public Sector	23	28	6	1	58
Community Service	20	25	13	0	58
Rural America	8	25	22	3	58

	Agree		Disagree	
Data Science	53	91.4%	5	8.6%
Public Sector	51	87.9%	7	12.1%
Community Service	45	77.6%	13	22.4%
Rural America	33	56.9%	25	43.1%

	I'm interested in learning: Technical Skill 1	I'm interested in learning: Technical Skill 2	I'm interested in learning: Professional Skill 1	I'm interested in learning: Professional skill 2
<b>Fellow</b>	Programming	data analytics	communication	leadership
<b>Fellow</b>	Machine Learning	Apache Spark (or something similar)	Leadership	Communication
<b>Fellow</b>	R	R Shiny	Interacting with Stakeholders	Managing a team
<b>Intern</b>	Data visualization	Machine learning	virtual collaboration	communication with people of different status
<b>Intern</b>	Data visualization	Web scraping	Working with teams	Delivering a product for stakeholders
<b>Intern</b>	web scraping	R shiny	working as a team member in a research position	polished presentation
<b>Intern</b>	Webscraping	Data Discovery	Remote Collaboration	Meetings - both leading and learning
<b>Intern</b>	Data analysis through R	Mapping data	How to create a new project and run it efficiently	How to work with people from a completely different discipline
<b>Intern</b>	Web scraping	Data Visualization	Team Science skills	presentation skills
<b>Intern</b>	GitHub	Shiny Dashboard	Database	SQL
<b>Fellow</b>	working with coding more	using code to manipulate and analyze data	practice meeting and communicating with stakeholders	working as a team to complete a large project
<b>Fellow</b>	Strong Data Analysis skills using R	Improved knowledge in statistics and statistical analysis	Understanding of what is expected in a professional report for a project.	Team management skills.
<b>Fellow</b>	improve my R and overall data science vocabulary	examples on how to import and display data in a useful way	mentoring undergraduates	being able to facilitate the work of others
<b>Fellow</b>	Data Visualization	Statistical methods	Policy implementation	Identifying challenges in rural communities
<b>Fellow</b>	GIS in R	Model building	Leadership	Organization
<b>Fellow</b>	Dashboard development	R skills	Community based research	Learn how to work with rural communities
<b>Intern</b>	SQL	Shiny	Team collaboration	Communicating results to stakeholders
<b>Intern</b>	GIS	More R packages	Working with professionals	Giving presentations/public speaking
<b>Intern</b>	Geospatial R	Data analysis	Presentation	Communication
<b>Intern</b>	Improving my ability to use R for data analysis	Data cleaning	Group collaboration	
<b>Intern</b>	Coding	Statistics	Public interfacing skills	Working with other academics
<b>Intern</b>	Statistical Analysis	Data Visualization	Working with multiple independent stakeholders.	Doing data science and allowing non-technical stakeholders to understand what's going on.
<b>Intern</b>	Data Analysis	Research	Group Coding Projects	Research
<b>Fellow</b>	NLP	SNA	Team Management	Sponsor Goal Identification
<b>Fellow</b>	Improve data visualization skills	Improve spatial analysis skills	Improve project management/collaborative work skills	Improve mentorship skills

<b>Fellow</b>	Advanced R Programming	Database Skills	Workplace Skills	Presentation Skills
<b>Fellow</b>	Be more comfortable coding in Python	Be able to work with data scrapped from the web	Improve my presentation skills	Learn ways to effectively communicate and build relationships with supervisors
<b>Fellow</b>	Collaborative code development	Interactive visualization	Policy document development	Development of institutional knowledge of federal agencies
<b>Fellow</b>	statistical modeling	data management	effective project management	good professional communication
<b>Fellow</b>	Analysis of big data	Work with census data	Public speaking	Project management
<b>Fellow</b>	machine learning	project version control	project team management	project scoping
<b>Intern</b>	Better knowledge of methods	Hands on experience in the data science framework	Working on a team/clean coding	Working with stakeholders
<b>Intern</b>	Greater Familiarity with Census Data	More practice mapping using non GIS tools	Engaging with community stakeholders	Working with people from a broad variety of disciplines
<b>Intern</b>	natural language processing	scraping twitter data	creating and presenting final products / research summaries	the ability to do in depth lit reviews
<b>Intern</b>	Python	GIS	Sending email	Presenting
<b>Intern</b>	Unsupervised Learning (Python?)- fully understand topic modeling	R Shiny Dashboard	Understanding about social capital frameworks	Understanding how to ethically model and integrate ethics into data science
<b>Intern</b>	GIS skills	Data visualization	Communication	Output presentation
<b>Intern</b>	Network analysis	Data visualization	Project management	Teamwork
<b>Intern</b>	More proficient use of R	Effective means of acquiring and compiling data	How to collaboratively code	teamwork
<b>Intern</b>	Machine Learning	NLP	Communication with stakeholders	Community outreach
<b>Intern</b>	interactive map	natural language processing	teamwork	communication with stakeholders
<b>Intern</b>	NPL	Data Cleaning	Effective Team Work	Communicating results efficiently
<b>Intern</b>	Learning R	Learning git/github	Working with a team	Presenting and working with stakeholders
<b>Intern</b>	network analysis	GIS	technical writing	journalistic writing (sage brief)
<b>Intern</b>	Working with R	Advanced Data Analytics	Working in a vertically integrated team	Collaborating remotely
<b>Intern</b>	Python experience	Data visualization	Presentations	Possible networking
<b>Fellow</b>	Software/programming	Analysis	Leadership	Communication
<b>Fellow</b>	Web scraping	SQL	Leadership	Teamwork
<b>Intern</b>	Web Scrapping	R programming for data cleaning	Communication	Teamwork
<b>Intern</b>	R language	Application of Statistics	Integrity	Collaboration
<b>Intern</b>	R programming best practices for reproducibility	Julia programming	Finding obstacles for the team, improving work flow	Communicating results clearly
<b>Fellow</b>	Data mining and analysis	New programming languages	Collaborative networking through many chains of commands	Understanding of all ethics when using data
<b>Fellow</b>	Learning data coding	Learning better research techniques	Networking	
<b>Intern</b>	Base R and its associated languages	Github	Collaborative problem solving	Networking
<b>Intern</b>	Research	Coding		

## DSPG Final Survey Responses Summary

### Final Survey Respondents

	Total	ISU	OSU	UVA	VT	VSU
Total in Program	61	12	14	24	5	6
Total Respondents	45	9	9	17	4	6
Fellows	15	2	3	6	2	2
Interns	30	7	6	11	2	4

Q: How would rate your overall experience in the DSPG program?

Extremely satisfied	Somewhat satisfied	Somewhat dissatisfied	Extremely dissatisfied	Total	Satisfied		Dissatisfied	
28 62%	17 38%	0 0%	0 0%	45	45	100%	0	0%

Q: I am interested in pursuing a career related to:

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Total
Data Science	28	12	3	2	45
Public Sector	21	17	7	0	45
Community Service	16	18	11	0	45
Rural America	9	16	14	6	45

	Agree		Disagree	
Data Science	40	88.9%	5	11.1%
Public Sector	38	84.4%	7	15.6%
Community Service	34	75.6%	11	24.4%
Rural America	25	55.6%	20	44.4%

I'm interested in learning:  
Technical Skill 1

I'm interested in learning:  
Technical Skill 2

I'm interested in learning:  
Professional Skill 1

I'm interested in learning:  
Professional skill 2

<b>Fellow</b>	R	Python	R Shiny	
<b>Fellow</b>	Statistical Analysis	Machine Learning	R Dashboards	
<b>Intern</b>	Functional coding in R		Team research	
<b>Intern</b>	Data analysis and cleaning	Data collection and review	Team-based project work	Communication in a team setting
<b>Intern</b>	Data cleaning	Data gathering	Data visualization	Linear Regression
<b>Intern</b>	Tableau	R	Communication	Public speaking
<b>Fellow</b>	Get a better understanding of R		Improve my skills working with people from other backgrounds.	
<b>Fellow</b>	R skills	Map making skills	Qualitative stakeholder data collection	
<b>Fellow</b>	Shiny dashboards	Data Visualization	Leadership abilities	Ability to identify strengths in each member
<b>Intern</b>	R	Statistical analysis	Presentation skills	Team communication/collaboration
<b>Intern</b>	Improve R skills			

<b>Intern</b>	R coding	Python	Team work	communication
<b>Intern</b>	Visualizations	Modelling	Communication	Teamwork
<b>Fellow</b>	applying statistical models	code/data management	Project Management	Networking/Communication
<b>Fellow</b>	Data visualization	Text mining?	Project management	Collaboration/teamwork?
<b>Fellow</b>	Work with Census data	Big data	Project management	Explain my work to someone
<b>Intern</b>	Git	Python	Emails	Being clear
<b>Intern</b>	NLP	Text Analysis	Communication	Presenting
<b>Intern</b>	network analysis		writing skills	collaboration
<b>Intern</b>	Topic Modeling	R Shiny	not sure	not sure
<b>Intern</b>	Visual Data Presentation	More practice wrangling data	Working with larger groups and faculty PIs	Working in university research
<b>Intern</b>	text analysis	network analysis		
<b>Fellow</b>	Software	Modeling	Leadership	Networking
<b>Fellow</b>		web scraping	leadership	teamwork
<b>Intern</b>	Geospatial visualization	Programming in R	Working in a team	Presenting
<b>Intern</b>	Mapping using R	Data Cleaning using R	Leading a difficult task	Communicating with an interdisciplinary team
<b>Fellow</b>	data visualization	Using census to answer questions	Understand how to find data even if none and answer a specific research question	Understanding how to explain the data to someone who may not understand the technical terminology
<b>Intern</b>	Coding	Research		
<b>Intern</b>	Additional Programming Languages	Using Data Analysis Tools	Ability to work well in a virtual professional environment	Teamwork
<b>Intern</b>	R			
<b>Intern</b>	Coding	Mapping	Presentation	Communication with team

**Q: To what degree did you acquire these skills?**

	<b>Extremely well</b>	<b>Very well</b>	<b>Moderately well</b>	<b>Not well at all</b>	<b>Total</b>
<b>Technical skill 1</b>	17	7	8	1	33
<b>Technical skill 2</b>	13	8	8	2	31
<b>Professional skill 1</b>	12	11	5	0	28
<b>Professional skill 2</b>	13	8	2	0	23

	<b>Acquired</b>	<b>Not acquired</b>
<b>Technical skill 1</b>	32 97.0%	1 3.0%
<b>Technical skill 2</b>	29 93.5%	2 6.5%
<b>Professional skill 1</b>	28 100.0%	0 0.0%
<b>Professional skill 2</b>	23 100.0%	0 0.0%

**Q: What other technical and/or professional skills did you acquire?**

<b>Fellow</b>	Interacting with stakeholders, presentation skills, team building, and leading a team.
<b>Fellow</b>	Mapping with leaflets, R coding, GIS, etc.
<b>Intern</b>	Too many to list. R shiney, interactive dashboards, data ethics and rights evaluation, web scrapping, improved data cleaning techniques, improved documentation techniques, git and github skills improvement, building an R package, troubleshooting/debugging in R, online community engagement strategies, communication skills, leaflet, mapping, EDA, fun with ggplot, modeling, census data acquisition, zoom presentation skills, and more!
<b>Intern</b>	I also learned important technical skills such as Shiny app creation, geocoding and mapping.
<b>Intern</b>	My technical skills most developed have been using R and working with geospatial data. My professional skills most developed have been presentation and collaboration skills.

<b>Intern</b>	Regression analysis and sentiment analysis.
<b>Intern</b>	R , Python, Tableau, Excel interpersonal skills, virtual collaboration, getting rid of biases.
<b>Intern</b>	I think I mostly learned professional skills such as working well in a group, doing research, and gaining the confidence to make decisions without often having someone to check those decisions.
<b>Intern</b>	Web scrapping, shiny dashboard
<b>Intern</b>	Presentation and communication skills
<b>Intern</b>	Broad teamwork based coding knowledge and an initial understanding of machine learning.
<b>Intern</b>	Collaborative coding
	Delegation
<b>Fellow</b>	Triage
	Prioritization
<b>Intern</b>	I definitely became more adept at using R generally and formed a solid foundation in natural language processing.
<b>Intern</b>	I gained experience working with stakeholders directly. I also learned building websites using R, presentation, and public speaking skills.
<b>Intern</b>	improved coding skills, presentation skills
<b>Fellow</b>	Improved my git skills substantially; improved my abilities to organize a collaborative project and think more about how well code may scale
<b>Intern</b>	It was very satisfying to see a project through to the end like we did.
<b>Intern</b>	Learning how to directly engage with research stakeholders.
<b>Fellow</b>	Professional: got better at project management.
	Technical: specific packages used for analysis.
<b>Intern</b>	Teamwork, Mapping, Time Management
<b>Fellow</b>	Time management
<b>Fellow</b>	I also learned communication skills especially in the virtual environment.
<b>Intern</b>	building website and dashboard, statistical analysis, working with someone else on a paper
<b>Intern</b>	Learning how to debug and write efficient code.